Twenty years of scientific fraud. An inventory of covert duplicate publications by Salvatore Magazù and Federica Migliardo of Università di Messina.

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More than half of the 256 regular peer-reviewed journal articles by Salvatore Magazù and Federica Migliardo are, to different extents, fraudulent. About 60 or 70 of them are duplicate parallel submissions. Over 70 papers contain some other covert duplication. Many figures have been published over and again without reproduction permission and without reference to previous publications. This report contains an annotated catalogue of all journal articles of Magazù and Migliardo, and attempts a first interpretation of this unprecedented scandal. While Magazù and Migliardo alone are responsible for their fraud, certain flaws in their manuscripts should nevertheless have been noticed much earlier. Referees have been incompetent, negligent, or overly indulgent, and a few editors have ignored pertinent advise.

Each case of fraud we studied was a fascinating vignette of human behavior, and often of human tragedy ... Broad & Wade [1]

I. INTRODUCTION

This is an unsolicited initial report on covert duplicate publications by Salvatore Magazù and Federica Migliardo of Università di Messina, Italy. The investigation started with the discovery of five covert parallel publications **13amse1**, **13cp4**, **13ecb**, **13fbp**, **13jncs**, imprudently all cited in a novel manuscript I had to referee. More covert duplicate content emerged soon. Altogether, seven neutron backscattering scans on sugar solutions had been published in over thirty original research papers, spread over a period of ten years. Each of these papers comes with an experimental section that contains no citation of earlier work, and describes the experiment as if performed on purpose and reported for the first time. This finding was communicated to concerned editors on 14 Feb 2014.

The present report extends the investigation to the entire publication record of Magazù and Migliardo, comprising 256 regular peer-reviewed journal articles, all listed and most of them annotated in Appendix B. There are 56 clear cases of **covert parallel submissions**, 16 pairs of duplicates with unclear timeline, and 71 more publications that contain some **covert duplicate content**. A few papers were tagged as borderline cases. More often than not the duplication includes the unreferenced reuse of figures or tables. The appendix lists some of them.

To produce this report within a decent amount of time, I had to work very fast. Given the size and complexity of the publication corpus (see for instance the parallel submission timeline on p 12), it seems unavoidable that this report contains quite some errors, from stupid copy&paste accidents to distressing faults of judgement. This is but an initial report and needs independent verification. However, the overall picture is solidly established. About half of the works of Salvatore Magazù are in some way fraudulent. For the smaller œuvre of Federica Migliardo, the proportion of duplicate works is even higher.

II. META-LITERATURE

A. Rules

Reputable scientific journals require that regular articles report *orginal research*. During submission, authors are reminded that the same material must not be submitted elsewhere.

For instance, the author guidelines of *The Journal of Physical Chemistry A,B,C* contain an *Ethics* section that starts with the following short paragraph:

> **Multiple Reporting of Research.** It is improper for an Author to simultaneously submit manuscripts describing essentially the same research to more than one journal.

Authors are further refered to the *Ethical Guidelines to Publication of Chemical Research* of the American Chemical Society, with the following pertinent paragraphs:

> **B7.** In submitting a manuscript for publication, an author should inform the editor of related manuscripts that the author has under editorial consideration or in press. Copies of those manuscripts should be supplied to the editor, and the relationships of

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such manuscripts to the one submitted should be indicated.

B8. It is improper for an author to submit manuscripts describing essentially the same research to more than one journal of primary publication, unless it is a resubmission of a manuscript rejected for or withdrawn from publication. [. . .]

B13. [. . .] Authors should not engage in self-plagiarism (also known as duplicate publication) — unacceptably close replication of the author's own previously published text or results without acknowledgement of the source. ACS applies a "reasonable person" standard when deciding whether a submission constitutes self-plagiarism/duplicate publication. If one or two identical sentences previously published by an author appear in a subsequent work by the same author, this is unlikely to be regarded as duplicate publication. Material quoted verbatim from the author's previously published work must be placed in quotation marks. In contrast, it is unacceptable for an author to include significant verbatim or near-verbatim portions of his/her own work, or to depict his/her previously published results or methodology as new, without acknowledging the source.

B. On transgressions

The appropriateness of the term *self-plagiarims* is debatable [2]; there are splendid examples of recycling one's own ideas in the arts, and in science there is a broad continuum between praiseworthy dissemination efforts and petty boredom [3]. Therefore, the more neutral term *duplicate publication* shall be prefered in the following.

There is nothing wrong with duplicate publication *per se* [4]; it can be a hard and rewarding intellectual effort to expose the same findings in different ways to different audiences [2]. The decisive ethical requirements are: full disclosure of sources and reuses (last sentence of rule B13), and no parallel submissions (B7, B8). Infraction of one of these requirements can deceive referees and editors into accepting a manuscript that otherwise would be rejected for containing too much known material or not being novel at all [5]. Of all criteria for or against duplicate publication, "the inadvertence on part of the editor is the only one that does not admit debate" [3]. "The underpinning of the editor-author relationship, indeed of the entire network of collabration among scientists, is trust" [3]. Covert duplicate publication is essentially a bretrayel of trust; for short, it is *fraud* [6], it is *criminal* [7]. Besides, it often infringes copyright [3, 6].

Covert duplicate publication is harmful in many ways [3, 6, 8]: It wastes time of editors and referees; it wastes journal space and distracts readers; it may distort metastudies (which is of particular concern in the medical field [9]); and it misrepresents scholarly achievement (also in an indirect way, by facilitating self-citations, which can inflate bibliometric measures more than often thought [10]).

It is pretty clear that the desire to superficially inflate publication lists is the driving force behind covert duplicate publications [3, 5, 6, 8, 11], as it is behind correctly cross-referenced *fragmented publications* (widely known as *salami slicing* into *least publishable units*) [11]. Rule B6 in the *Ethical Guidelines* advises against fragmented publication in form of *should* clauses so vague that infringements will never ever have serious consequences. One could further object against this rule that a decent degree of fragmentation is better than procrastination [12], and that unenforceable ethical rules do little more than disadvantaging the more conscientious individuals. To fundamentally improve the situation, evaluation criteria need to change [2, 13], which they started to do [14].

Since all this is about wrongly resolved conflicts between personal interests and the goal of scientific communication, it is plausible that prevalence is highest where personal interests are potentiated by corporate ones. Most discussions of duplicate publications can indeed been found in editorials of medical journals [3, 4, 7, 8, 11] (to cite just a few). One journal discovered in two years ten covert parallel *submissions* [11]. A survey of more than 1200 *published* papers in anesthesia, analgesia and critical care found that 5.3 % of them were covert duplicates of other articles in the sample, many of them sponsored by the pharmaceutical industry [15]. In a smaller metastudy on the efficacy of a drug, 17 % of duplicates were discovered [9]. These findings do not allow for extrapolations into other disciplines where the extent of the problem is completely unknown. The tiny though growing number of retractions [13] could sustain hope that after all covert duplicates are a rare exception. One purpose of this report is to shatter such optimism by showing what a simple deception pattern could remain undetected over what a long time.

C. Consequences

While there is broad consensus that covert duplicate publication is unethical if not plain criminal, it is not always clear how journals should react to proven infractions. Some editors put the authors "on a black list and urge other journals to deny them the right for publication" [7].

However, duplicate publications are not only a deception of editors and referees but of the readership. And this deception *goes on* as long as the duplicate paper are normally listed in the journals' tables of contents. It is for course not possible to withdraw printed journal issues from circulation, nor it is desirable to remove fraudulent

online publications from the publishers' webservers. Each published paper, whatever its faults, is part of the history of its scientific field. It has been read by others, it has possibly been cited or still will be cited by unaware colleagues, therefore it must remain retrievable. History cannot be reversed.

But when discovered and verified, deception must be stopped. Therefore it is indispensable that journals publish *retractions*, and pin a note to online publications. Negligent or incompetent handling of such cases by some journals [13] has led a medical editor and a medical science journalist to create a website, `retractionwatch.com`, that monitors retractions and exposes journals that fail to inform their readership in adequate ways.

In the œuvre of Magazù and Migliardo, many papers are compilations that combine valid new research with a covert republication of old material. Retraction will not annihilate their scientific production. It will but warn readers that certain papers do not comply with scientific standards and might not have been published had editors and referees known all concealed facts. Informed readers can then souvereignly decide whether or not to trust data and conclusions from such a source.

III. INVESTIGATED CORPUS

A. Bibliography and publication count

The investigated corpus is based on the two author's personal publication lists in Google Scholar as of 1 March 2014. Screen copies have been saved. There were 292 entries for S. Magazù (with publication years 1986–2014), of which 7 entries without year could be immediately discarded as junk, leaving 285 entries. There were 140 entries for F. Migliardo (1998–2014), of which 4 junk without year, leaving 136 entries. Only 13 of the remaining entries were listed for F. Migliardo, but not for S. Magazù. So all meaningful records could be merged into one list with 298 entries.

Since the initial lists are generated automatically by Google, they are reliable only when carefully corrected by the owner. This was not the case here; both personal lists contained erroneous entries. In the merged collection, there were 12 duplicates, 4 papers authored by others, 3 tables of contents mistaken for contents, and 5 entries that could not be related to published material. 10 papers were contributions to books, most of them containing conference proceedings; they were disregarded. This leaves the count at 264 publications in international journals, of which 252 authored or coauthored by S. Magazù, and 122 coauthored by F. Migliardo.

By cross-checking the websites of publishers and by backtracing citations no additional papers could be found. It seems that the lists generated by Google fully cover the relevant research literature in our field. If this is the case, then the above counts are in conflict with the authors' CVs in **13cp2**: Salvatore Magazù is presented as "author of more than 300 articles in international journals and more than 200 communications in conferences", and Federica Migliardo's research achievements are "testified by more than 150 articles." These numbers are not credible. There is no plausible reason why thirty or fifty peer-reviewed international journal articles should just be missing from the Google Scholar record.

B. Inspection and assessment

All 264 journal publications are listed in Appendix B. They are sorted by publication year and journal. Labels are composed of the publication year, initials of the journal name, and when necessary a sequential number. Journal issues identified as conference proceedings are denoted in brackets after the issue number; besides this, they were not treated differently from other papers. Each catalogue entry also contains a status letter that informs whether the paper has been examined and with which result.

Eight papers were exluded from further consideration (status letter G) for not being regular peer-reviewed research reports (editorials, replies to comments, abstracts) or for being later replaced by an extended version. A set of 61 papers were categorized as unsuspicious enough to warrent no investigation (status letter N), among them the 12 first papers (from 1986 to 1990), papers with titles indicating isolated subjects, and papers with corresponding author from outside Sicily.

The remaining 195 papers were downloaded or obtained through library services. I inspected all of them, and rubricated their content. Papers describing similar experiments on similar samples were studied side by side, and duplications noted. A handful of recurrent duplication patterns emerged. Once an overall understanding was reached, all papers were inspected again, and catalogue entries finalized. In particular, duplicate figures were listed, since they constitute the easiest proof of illicit duplication, recognizable also by complete outsiders, and litigable when under copyright. Status letters D,P,Q all designate covert duplicates, letter U indicates that a paper appeared unsuspicious to me, and letter B stands for borderline cases. The final statistics is listed at the end of Appendix B.

IV. DECEPTION PATTERNS

A. Covert parallel submissions

Perhaps the simplest scheme of scientific fraud is **covert parallel submission**. Not for nothing journals require upon submission an explicit confirmation that the manuscript is not under consideration elsewhere. For a simple and reliable identification of parallel submissions, it would be desirable that published articles mention reception and publication date. Unfortunately, not all jour-

nals do this. Conference proceedings more often than not have no reception dates; in these cases, the date of the conference was taken as a reasonable proxy of the submission date. As a result, besides 57 papers marked as covert parallel submissions (status letter P), there are 8 more pairs of duplicate papers with unclear timeline (letter Q). All other forms of covert duplicate publication are denoted in the catalogue by status letter D.

The most straightforward case is the parallel submission of just two overlapping papers (e. g. **08jcp** and **09pre**). But there are also cases of covert threefold (see **98jcp**), fourfold (**99jpcm2**), fivefold (**03jcp**), and sixfold (**13amse1**) submission. And often, things are more complicated. Parallel submission is not a transitive relation. If A has been submitted in parallel with B, and B with C, it is still not said that A and C have been simultaneously under consideration, or share content. For instance, **98jpcm** and **98ncd5** are covert parallel submissions, **98jpcm** and **99jms2** are, but **98ncd5** and **99jms2** are not.

B. Covert compilation

In many cases, overlapping papers describe several experiments performed to study one system. For instance, **99jms1** describes investigations of trehalose solutions by ultrasound measurements, Raman scattering, and NMR. The ultrasound part is a covert duplicate of **97jpcb**; the Raman part is a covert parallel submission with **98ncd3**, **99jpcb** and **99jpc2**, whereas the NMR report is original and singular. **98ncd3** in turn contains a viscosity chapter that is a covert parallel submission with **98jcp**, which contains a section on photon correlation spectroscopy that is a covert duplicate of **97ptps1**. In this way, a complicated network of intercalated covert duplicates has been created, illustrated in the catalogue by an exemplary submission timeline (FIG 1, p 12) and many figure concordance tables. As a result, in many years more than 75% of all papers are to some extent covert duplicates. And this not for a lack of data or of ideas: there are regularly new data, and new ways of data analysis. Often, however, there is not even *one* clean initial report. New data are published from the onset in combination with unreferenced old data sets. In the catalogue, this form of publication is occasionally called **enriched covert compilation**.

C. Covert reanalyses

Another recurrent deception pattern is the **covert reanalysis** of old data. Covert because the paper comes with an experimental section that does not refer to earlier work by the same method on the same system, and describes the experiment as if freshly performed, as if to be analysed here for the first time.

As an extreme example, in the years 2003–2013 S. Magazù and associates published 33 journal articles **03cp1**, **03jcp**, **04bpj**, **04jcp**, **04jml2**, **04jms2**, **04jpcb1**, **04pb4**, **04pccp**, **05chr**, **05jps2**, **05ps**, **06jbp**, **06pb**, **08cp4**, **08fc2**, **08jcp**, **08jms2**, **09jampo**, **09pre**, **10bba**, **10js**, **10qascf**, **11jncs**, **12ebpj2**, **12jpcb2**, **12jpcs**, **13amse1**, **13cp4**, **13ecb**, **13fbp**, **13jcpbp**, **13jncs** that report on solutions of the disaccharides maltose (M), sucrose (S), or/and trehalose (T), in normal (H) or heavy water (D), investigated by elastic neutron scattering (ENS) on one and the same instrument (IN13). A total of seven samples has been measured: M:19H, S:19H, T:19H, S:6H, T:6H, S:19D, T:19D. Some papers indicate that all possible twelve combinations (M,S,T):(6,19)(D,H) have been measured, but data are only shown for the above seven compositions. Except for the very first article **03cp1** on (S,T):19D, all the other 32 papers are to some extent *covert duplicate publications*. The initial reports **03jcp**, **04bpj**, **04jpcb1**, **04pb4**, **04pccp** on (M,S,T):(6,19)H have been submitted in parallel, as described under **03jcp**. The remaining 27 papers in the series are *covert reanalyses*.

To sustain this long series of republications, the data are analysed in different ways, discussed in different contexts, and combined with results from other experimental. Mean-squared diplacements, Zaccai force constants or rigidities, and the transition to an anharmonic regime are at the center of **03cp1**, **03jcp**, **04bpj**, **04pb4**, **04jml2**. The non-Gaussianity of the elastic structure factor appears in **04jms2**, **05ps**. Angell fragility is discussed in **04pccp**, **04jcp**, **04jpcb1**, **05chr**, **06pb**.

Starting in 2008, *covert reanalysis* is combined with *covered compilation*: the IN13 data are reused in combination with quasielastic measurements **08fc**, and contrasted with ternary mixtures **08cp**, **08jms**. In **08jms**, elastic scans at different spectrometers are combined, involving heavy formalism. This formalism is varied in **10bba**, which contains a citation of **08jcp**, but does not disclose the considerable reuse of formulae and figures. The latest series of reanalyses starts with **12jpcb2** which introduces a wavelet formalism to explode the temperature dependence of the elastic scattering intensity into a three-dimensional scalogram. This idea is then applied to the wavenumber dependence of the same data in the sixfold parallel submission **13amse1**, **13cp4**, **13ecb**, **13fbp**, **13jcpbp**, **13jncs**. Maybe some more are still in the publication pipeline?

V. HOW COULD THIS HAPPEN?

A. Too unexpected to be discovered

How could this serial fraud go on for over twenty years? I am in a good position to try an answer because I have been working in about the same field, and have spent way too much time reading papers from Messina. Since long I had a feeling that something was wrong with these pub-

lications, and I know some colleagues shared that feeling. The papers were too many to keep track of; they were too long for what they had to say; they had boring repetitions — and yet they were timely contributions to what was discussed in the community; so you had to take them seriously. At one moment Magazù *et al.* intervened **11jpcb**, **11sri** in a debate in which Wolfgang Doster and myself were party [16, 17], prompting each of us to write a comment [18, 19]. Even then, studying a number of Messina papers in depth, I had not the least suspicion that something could be wrong with the experimental section.

So part of my answer is simple. Two axioms are central for our work: Since scientific communication is built on trust, we do not lie. And the data are sacred. When reviewing a paper, we are ready to suspect that the authors are not telling the full story, that they tweaked their analysis, that they sugarcoated their conclusions, but it would take long before we suspect that they are plain lying, or that they manipulated their raw data — and we would not remotely imagine that they lie about where their data come from. Magazù's scheme worked *because it was so gross*, because it breached several core rules of our work ethics. Nobody would have imagined that the phrase "Experiments were carried out on IN13…", when not accompanied by a citation, can mean anything other than: "The experiments, about which we are reporting for the first time in this original research paper, were carried on IN13…"

B. Questions to referees

But this is not the full answer. Referees cannot entirely be saved from blame. Besides all the flagrant lies (which nobody discovered because they were too far beyond our expectation horizon), there were also a number of lighter flaws that knowledgeable and diligent referees should have noticed.

Many papers by Magazù and Migliardo report on neutron scattering experiments, carried out at large facilities like the ILL (Grenoble, France) and ISIS (RAL Didcot, England). These facilities have rules that foresee that a *local scientist* who helped in performing an experiment be invited to become a coauthor of resulting publications [20, 21]. A majority of the Magazù and Migliardo papers have no such coauthors; often there is not even an acknowledgement, or the acknowledgement goes to the facility ("for dedicated runs"), but not to any individual. Had referees noticed this clear infringement of a well known policy, they could have guessed two possible explanations: Either the authors show an inadmissible disrepect for the intellectual contribution of those who built and operate the instruments. Or the local contacts have been duly invited to be coauthors, but opted out because they cannot agree with the manuscript. In both cases, it would have been advisable for the editor to request a statement from the involved instrument scientist.

In several papers, the experimental part describes experiments that do not reappear later. For instance, **01ps** reports on four different experimental techniques; one of them does not contribute a single result. **13ecb** and **13jpcbp** describe experiments on 1:6 and 1:19 solutions, but experimental results are only shown for 1:19. Similar blunder has happened a number of times with light and heavy water.

Some papers are compiled of completely incongruent parts. **13cp6** reports on thermal stability and viscosity of an enzyme solution, and on quasielastic neutron scattering by trehalose/glycerol mixtures. **08cp4** and **12ebpj2** are similar cases. To me, these compilations make no sense.

Several papers (**08jcp** and indications there) use an inappropriate Fourier convention that is inconsistent with standard definitions of the involved functions. Even a public comment [19] did not prevent the blunder from being repeated. It culminates in **13amse1** where the Fourier backtransform is broken. Referees ought to notice such errors, or declare themselves incompetent to evaluate texts that contain mathematical equations.

In a number of cases, formulæ are accompanied by self-citations, for instance in **06pre**, **06ijps2**, **08jpcm**. In the cited work, the formulæ are then correctly attributed to other authors. Another example of dissembling appropriation of other's merits are citations of the kind "Migliardo et al [..]" when the cited work has actually another first author. Worse if the Migliardo of the cited work is not the Migliardo of the manuscript's byline (**03jcp**, **06pb**). Another story, too long to be told here, is the reinvention of Wolfgang Doster's *elastic resolution spectroscopy* under the name *resolution elastic neutron scattering* (**11rsi**).

C. A question to editors

Some editors were warned by diligent referees. I cannot understand why this advise was ignored. When a referee points out incorrect citations, inappropriate duplication, or wrong math, then this is not just a matter of taste that can be overruled by one or two opposite personal opinions; it is an impediment that must be dispelled before the manuscript can be published.

D. And a question to publishers

I feel that conference proceedings, filled with short and unsubstantial papers, not taken seriously by anybody, are harmful since they blur, at least in the perception of many, the line of what constitutes an original publication. I anticipate vivid discussion about how many covert duplicates must be subtracted from my count because the recycled original work was *only a conference paper*. Answer to this: *Physica B* explicitly labels *all* papers as "original research paper". In the spirit of Sect. II.B,

whatever has appeared in a peer-reviewed journal is subject to the same rules. There is no valid excuse. And yet we might come to the conclusion that certain types of proceedings are perceived as an invitation to abuse.

And I doubt whether such proceedings still make sense. In former times they were useful for keeping a community in touch. Nowadays, there are so many other communication channels, search engines, and configurable alert services that proceedings may have become obsolete. These days, we are not lacking communication, but time to read.

Acknowledgement

I cordially thank the Central Library of Forschungszentrum Jülich for speedy delivery of all requested papers, even from the most obscure journals.

Appendix A: Abbreviations

Samples:

d-	deuterated
pd-	partially deuterated
D	D_2O
E	ethylene glycol
G	glycerol
H	H_2O
L	Lysozyme
M	maltose
O	ornithine transcarbamoylase
PM	poly(ethylene oxide) with molar weight M. Also called poly(ethylene glycol), especially at low M
S	sucrose
T	trehalose
U	dUTPase
UICC	dUTPase-inhibitor candidate complex (don't ask me what this is)

These are combined into abbreviations like (S,T):(10,19)H, which designates the four aqueous solutions S:10H, S:19H, T:10H, T:19H. Brackets like in L[:D] mean: pure L, and L:D.

Techniques:

DSC	differential scanning calorimetry
DFT	density functional theory
ENS	elastic neutron scattering using high-resolution spectrometer
FTIR	Fourier transform infrared spectroscopy
INS	inelastic neutron scattering
IR	infrared spectroscopy
MD	molecular dynamics simulation
NSE	neutron spin echo spectroscopy
PCS	photon correlation spectroscopy
QENS	quasielastic neutron scattering
RWS	Rayleigh-wing spectroscopy (depolarized low-frequency Raman scattering)
SANS	small-angle neutron scattering

Instruments:

HFBS	neutron backscattering spectrometer at NIST
IN4	neutron time-of-flight spectrometer at ILL
IN6	neutron time-of-flight spectrometer at ILL
IN10	neutron backscattering spectrometer at ILL
IN13	neutron backscattering spectrometer at ILL
IRIS	neutron backscattering spectrometer at ISIS
LOQ	neutron small-angle diffractometer at ISIS
MARI	neutron time-of-flight spectrometer at ISIS
Mibemol	neutron time-of-flight spectrometer at LLB
NEAT	neutron time-of-flight spectrometer at BENSC
OSIRIS	neutron backscattering spectrometer at ISIS
SANDALS	neutron diffractometer at ISIS
SPAN	neutron spin-echo spectrometer at BENSC

Neutron facilities:

BENSC	Berlin Neutron Scattering Center, Germany
ILL	Institut Laue-Langevin, Grenoble, France
ISIS	Neutron spallation source in Didcot, England
LLB	Laboratoire Léon Brillouin, Centre d'Études Nucléaires de Saclay, France
NIST	National Institute of Standards and Technology, Gaithersburg, MA, USA
ORNL	Oak Ridge National Laboratory, TE, USA

Appendix B: Annotated publication list

Status codes:

B	borderline to covert duplication
D	duplication (other than P or Q)
G	ignorable genre (editorial, reply, abstract)
N	not investigated
P	parallel submission
Q	possibly parallel submission, dates missing
U	unsuspicious

In the author lists, an asterisk denotes the corresponding author.

In comparison of figures, m denotes the main frame, i an inset, and p an unspecified part of the figure.

1986 paper

86ssc (#1) **N**
Some evidence of LO-TO splitting in disordered $ZnCl_2$
ML Cacciola, S Magazù, P Migliardo, F Aliotta, C Vasi
Solid state communications 57 (7), 513-517 (1986)

1987 papers

87ncd (#2) **N**
Local coordination and dynamics in liquid antimony trichloride/water mixture
G Galli, S Magazù, P Migliardo, F Aliotta, D Majolino, C Vasi
Il Nuovo Cimento D 9 (7), 829-844

87pm (#3) **N**
Slow relaxation processes in molten $ZnCl_2$ studied by photon correlation spectroscopy
S Magazù, G Maisano, F Mallamace, P Migliardo, F Aliotta, C Vasi
Philosophical Magazine B 56 (2), 155-165 (1987)

1988 paper

88ncd (#4) **N**
Study of the glass transition region in amorphous selenium by EXAFS
M Federico, G Galli, S Magazù, D Majolino, E Burattini
Il Nuovo Cimento D 10 (4), 425-434 (1988)

1989 papers

89jpc1 (#5) **N**
Relaxation process in deeply supercooled water by Mandelstam-Brillouin scattering
S Magazù, G Maisano, D Majolino, F Mallamace, P Migliardo, F Aliotta, ...
The Journal of Physical Chemistry 93 (2), 942-947 (1989)

89jpc2 (#6) **N**
Structural changes in potassium oleate microemulsions by ultrasound measurements
S Magazù, G Maisano, D Majolino, F Mallamace, P Migliardo, N Micali
The Journal of Physical Chemistry 93 (8), 3251-3255 (1989)

89mp (#7) **N**
Velocity and damping of thermal phonons in isomeric alcohols
S Magazù, D Majolino, F Mallamace, P Migliardo, F Aliotta, C Vasi, ...
Molecular Physics 66 (4), 819-829 (1989)

89pra1 (#8) **N**
Large structural order in dense microemulsions studied by light scattering
S Magazù, D Majolino, G Maisano, F Mallamace, N Micali
Physical Review A 40 (5), 2643 (1989)

89pra2 (#9) **N**
Growth of fractal aggregates in water solutions of macromolecules by light scattering
S Magazù, G Maisano, F Mallamace, N Micali
Physical Review A 39 (8), 4195 (1989)

89ssc1 (#10) **N**
Evidence of large cluster aggregates in potassium oleate microemulsion by elastic light scattering measurements
S Magazù, G Maisano, D Majolino, F Mallamace, F Aliotta, N Micali
Solid state communications 69 (9), 883-885 (1989)

89ssc2 (#11) **N**
Fractal-like structures in polystyrene solutions studied by light scattering intensity
S Magazù, D Majolino, F Mallamace, N Micali, C Vasi
Solid state communications 70 (3), 233-236 (1989)

1990 paper

90ncd (#12) **N**
EXAFS and Raman studies of ion-ion and ion-water interactions in strong II-I electrolytic solutions
G Galli, S Magazù, D Majolino, P Migliardo, MC Bellissent-Funel, F Aliotta, ...
Il Nuovo Cimento D 12 (2), 197-207 (1990)

1991 papers

91mp1 (#13) **N**
Hyperacoustic properties and local structure in hydrated molten salts
G Maisano, D Majolino, P Migliardo, S Venuto, F Aliotta, S Magazù, ...
Molecular physics 72 (3), 549-557 (1991)

91mp2 (#14) **N**
Relaxation phenomena in mixed isomeric alcohols by Mandelstam-Brillouin scattering
D Majolino, P Migliardo, F Aliotta, S Magazù, C Vasi, A D'Aprano, ...
Molecular Physics 73 (1), 27-41 (1991)

91pcl (#15, submitted 12jun90) **Q**
Sound propagation in thyxotropic structures
F Aliotta, ME Fontanella, S Magazù, F Wanderlingh
Physics and Chemistry of Liquids 23 (3), 163-173 (1991)

Hypersound in L:10H by Brillouin scattering. **Covert duplicate** (parallel submission?) of **91pcps2**, see there.

91pcps1 (#16) **N**
Microemulsion as model system for the study of the glass-like transition: Refractive index and calorimetric measurements
F Mallamace*, S Magazù, N Micali, P Salvetti
Progress in Colloid and Polymer Science 84 [Trends in Colloid and Interface Science V, volume edited by M Corti & F Mallamace], 155-158 (1991)

91pcps2 (#17, submission undated) **Q**
Hypersonic properties in macromolecular aqueous solutions
F Aliotta, ME Fontanella*, S Magazù, U Wanderlingh
Progress in Colloid and Polymer Science 84 [see above], 483-486 (1991)

Hypersound in L:10H by Brillouin scattering. **Covert duplicate** (parallel submission?) of **91pcl**, see there. Fig 1 here is Fig 5 there.

1992 papers

92mclc1 (#18, submitted 11mar91) **U**
Ion-ion and ion-solvent interaction effects in the acoustic responce of aqueous polymeric solutions
F Aliotta, S Magazù, G Maisano, D Majolino, P Migliardo
Molecular Crystals and Liquid Crystals 212 (1), 183-188 (1992)

Ultrasound (25 MHz) and hypersound (Brillouin scattering) in P600.

92mclc2 (#19, submitted 11mar91) **Q**
Dynamic light scattering studies on lecithin polymer-like gels
F Aliotta, ME Fontanella, S Magazù, C Vasi, V Crupi, G Maisano, ...
Molecular Crystals and Liquid Crystals 212 (1), 255-262 (1992)

RWS spectrum of lecithin gel. **Covert duplicate** (parallel submission?) of **92pcps**, see there.

92pcps (#20, submission undated) **Q**
Dynamical properties of lecithin-based microemulsions
F Aliotta, ME Fontanella*, S Magazù, G Maisano, D Majolino, P Migliardo
Progress in Colloid and Polymer Science 89 [Trends in Colloid and Interface Science VI], 253-257 (1992)

RWS spectrum of lecithin gel. **Covert duplicate** (parallel submission?) of **92mclc2**, see there. Figs 1,2,3 here are Figs 1,3,2 there.

1993 papers

93jpcm (#21, submitted 6apr93) **U**
Depolarized quasi-elastic light scattering and H-bond cooperative effects in liquid alcohols
V Crupi, S Magazù, G Maisano, D Majolino, P Migliardo
Journal of Physics: Condensed Matter 5 (37), 6819 (1993)

Pentanol and dimethyl-butanol investigated by RWS. Later duplicated in **94jms1** and **96pb**.

93mp (#22, submitted 24mar92) **B**
Sound velocity and hydration phenomena in aqueous polymeric solutions
G Maisano, D Majolino, P Migliardo, S Venuto, F Aliotta, S Magazù
Molecular Physics 78 (2), 421-435 (1993)

Sound velocity (3 MHz) and density measurements on P600:*H (and another polymer solution, not reappearing later) at 283–353 K and as function of concentration. Earlier work by the same techniques (ultrasound at 25 MHz, density measurements) for one concentration is not cited, hence **borderline to covert duplication**. Later duplicated several times (**94jms2**, ...).

1994 papers

94jms1 (#23, submitted 19oct93) **D**
IQENS, Rayleigh wing and Raman studies of H-bonded liquids
V Crupi, S Magazù, G Maisano, D Majolino, P Migliardo*
Journal of molecular structure 322 [Proceedings of the Xth Workshop "Horizons in Hydrogen Bond Research", Autrans, sep93], 267-277 (1994)

Enriched covert compilation: Pentanol and dimethyl-butanol investigated by three techniques:

- Raman scattering, **covert duplication** of **94pcl1**.
- RWS, **covert duplication** of **93jpcm**: Figs 3,4,5 are Figs 3,4,7 of **93jpcm**.
- QENS (Mibemol, 254–353 K), apparently reported here for the first time, later duplicated in **96pb**.

94jms2 (#24, submitted 19oct93) **P**
Non-ideal compressibility in poly(ethylene oxide)-water solutions induced by H-bond interactions
MP Jannelli, S Magazù*, G Maisano, D Majolino, P Migliardo
Journal of molecular structure 322 [Proceedings as above], 337-343 (1994)

Covert parallel submission with **94ncd1** and **94ps2**, **enriched covert compilation** of experiments on (E,P):*H:

- Sound velocity measurements (3 MHz) in (E,P(200,600,2k)):*H at 293, 313, 343 K and as function of concentration. As for P600:*H, this is a **covert duplication** of **93mp**; for the other data, there is some overlap with **94ncd1**.
- Short note on a "preliminary" QENS (Mibemol) study of P600[:10H] at 313K, **covert parallel submission** with **94ps**.

94ncd1 (#25, submitted 28oct94) **P**
Neutron scattering and compressibility measurements for the study of hydration effects on polymeric aqueous solutions
V Crupi, MP Jannelli, S Magazù, G Maisano, D Majolino, P Migliardo, C Vasi
Il Nuovo Cimento D 16 (7) [I International Conference on Scaling Concepts and Complex Fluids, Copanello, jul1994], 809-816 (1994)

Covert parallel submission with **94jms2** and **94ps2**, **enriched covert compilation** of experiments on (E,P):*H:

- Sound velocity measurements (3 MHz) in (E,P(200,600)):*H at 283–353 K as function of concentration; compressibility results shown for 333 K. As for P600:*H, this is a **covert duplication** of **93mp**; for the other data, there is some overlap with **94jms2**.
- QENS (IRIS) study of E[:D], (P200,P600)[:H] at 293 K. Similar experiment at Mibemol should at least have been mentioned.

Later duplicated in **95pb** and **95ps1**.

94ncd2 (#26, submitted 28oct94) **U**
Nature of depolarized quasi-elastic light scattering in associated and non-associated liquids
V Crupi, MP Jannelli, S Magazù, G Maisano, D Majolino, P Migliardo
Il Nuovo Cimento D 16 (7) [conference as above], 901-910 (1994)

RWS study of propanol, isopropanol, and other samples.

94pcl1 (#27, submitted 29apr93) **U**
Dynamical Evidence of Aggregates in Isomeric Alcohols Mixtures by O—H Stretching Band Analysis
V Crupi, S Magazù, G Maisano, D Majolino, P Migliardo, S Venuto
Physics and Chemistry of Liquids 26 (4), 263-272 (1994)

Pentanol and dimethyl-butanol investigated by Raman scattering. Duplicated in **94jms1**.

94pcl2 (#28, submitted 17jan94) **U**
Growth processes and associative properties in alcohols by dielectric and FTIR spectroscopy
V Crupi, MP Jannelli, S Magazù, G Maisano, D Majolino, P Migliardo
Physics and Chemistry of Liquids 28 (2), 117-127 (1994)

Pentanol and dimethyl-butanol investigated dielectric permittivity and FTIR.

94ps1 (#29) **N**
Vibrational and diffusional behaviour of H_2O molecules encaged in reversed micellar aggregates
V Crupi, S Magazù, G Maisano, D Majolino, P Migliardo
Physica Scripta 50 (2), 200 (1994)

94ps2 (#30, submitted 13may93) **P**
Hydration phenomena and cooperative diffusion in polymer-water solutions
MP Jannelli, S Magazù, G Maisano, D Majolino, P Migliardo
Physica Scripta 50 (2), 215 (1994)

Covert parallel submission with **94jms2** and **94ncd1**, **covert compilation** of experiments on P600:*H:

- QENS (Mibemol),
- Sound velocity (3 MHz) and density at 293–353 K.

1995 papers

95mp (#31, submitted 16aug94) **U**
Rayleigh wing and Fourier transform infrared studies of intermolecular and intramolecular hydrogen bonds in liquid ethylene glycol
V Crupi, MP Jannelli, S Magazù', G Maisano, D Majolino, P Migliardo, D Sirna
Molecular Physics 84 (4), 645-652 (1995)

Reports on two experiments:

- E by RWS
- E,P(200,2k) by FTIR

95pb (#32, submission undated) **D**
Diffusive motion and H-bond effects on liquid poly(ethylene oxide) and on its aqueous solutions
R Giordano, S Magazù, G Maisano, D Majolino, P Migliardo*, C Vasi, U Wanderlingh
Physica B 213, 515-517 (1995)

Covert duplicate of **94ncd1**, describing the same experiment on E[:D], (P200,P600)[:H] at 293 K by IRIS. Fig 3 is Fig 3 of **94ncd1**.

95ps1 (#33, submitted 14jun94) **D**
IQENS diffusive behaviour and hydrogen bond effects on polymer-water systems
S Magazù*, G Maisano, D Majolino, P Migliardo, C Vasi, U Wanderlingh
Physica Scripta 1995 (T57), 175 (1995)

Covert compilation of experiments on E:(H,D), P-200:H; **covert duplication** (parallel submission?) of **95pb**.

- QENS (IRIS) at 293 K, already reported in **94ncd1**. Figs 3,4 show a subset of data points from Figs 1,3 of **95pb**.

- Sound velocity measurements (3 MHz) to determine compressibilities; **covert duplication** of **93mp** (though cited in the introduction), **94jms2**, **94ncd1**.

95ps2 (#34) **N**
Structural properties of amorphous bulk Fe, Co and Fe-Co binary alloys
R Bellissent, G Galli, T Hyeon, S Magazù, D Majolino, P Migliardo, ...
Physica Scripta 1995 (T57), 79 (1995)

95stch (#35) **N**
Mössbauer and FTIR spectroscopy studies of archaeological wares of the Himera necropolis
P Agozzino, DI Donato, S Magazù, D Majolino, E Alii
Science and technology for cultural heritage: journal of the "Comitato Nazionale per la Scienza e la Tecnologia dei Beni Culturali", CNR 4 (2), 59-65 (1995)

1996 papers

96jms1 (#36) **N**
QELS and SANS studies of octyl-β-glucoside micellar solutions
A D'Aprano, R Giordano, MP Jannelli, S Magazù, G Maisano*, B Sesta
Journal of molecular structure 383 (1) [Proceedings of the XIth international workshop "Horizons in hydrogen bond research", Birstonas, Lithuania, sep95], 177-182 (1996)

96jms2 (#37, submitted 12oct95) **U**
Raman spectroscopic study of water in the poly(ethylene glycol) hydration shell
V Crupi, MP Jannelli, S Magazù, G Maisano, D Majolino*, P Migliardo, R Ponterio
Journal of molecular structure 381 (1) [Proceedings as above], 207-212 (1996)

P600:*H by Raman, duplicated in **96pb**.

96jms3 (#38, submitted 12oct95) **U**
Viscosity and photon correlation spectroscopy measurements in aqueous solutions of poly(ethylene glycol)
DI Donato, MP Jannelli, S Magazù, D Majolino*, G Maisano, P Migliardo, R Ponterio
Journal of molecular structure 381 (1) [Proceedings as above], 213-217 (1996)

P(600,8k):*H by
- Ubbelohde viscosimeter,
- PCS.

96jms4 (#39, submitted 12oct95) **U**
Hydrogen bonding and the ultrafast time response in carboxylic acids
V Crupi, S Magazù*, G Maisano, D Majolino, P Migliardo, AM Musolino
Journal of molecular structure 381 (1) [Proceedings as above], 219-226 (1996)

"Preliminary study" of formic and acetic acid by RW-lsc.

96jpcm (#40, submitted 15may96) **U**
Transport properties of liquid alcohols investigated by IQENS, NMR and DLS studies
MP Jannelli, S Magazù, P Migliardo, F Aliotta, E Tettamanti
Journal of Physics: Condensed Matter 8 (43), 8157 (1996)

Ethanol, octanol, decanol by QENS (Mibemol), D-NMR, Raman/RWS. Later duplicated in **97pb2**.

96mp (#41, submitted 2aug95) **D**
Hydration phenomena and hydrogen bond connectivity in polymeric aqueous solutions
ID Donato, S Magazù, G Maisano, D Majolino, P Migliardo, A Pollicino
Molecular Physics 87 (6), 1463-1469 (1996)

Sound velocity and density of (E,P(200,400,600,1k,2k)):*H at 293–343 K, data tabulated for 293, 313, 343 K. Correctly citing **93mp** [13] as "preliminary studies". However, **covert duplication** of **94jms2**, **94ncd1**, **94ps2**, **95ps1**.

96pb (#42, submission undated) **D**
IQENS—dynamic light scattering complementarity on hydrogenous systems
S Magazù
Physica B 226 (1), 92-106 (1996)

This is a **covert compilation** of **93jpcm**, **94jms1**, **94ncd1**, **95pb**, **95ps1**, **96jms2**, **96mp**, and a bold **appropriation** of collective work.

It reports on two seemingly unrelated series of experiments, entitled "selected topics". Topic one is an investigation of ethylene glycol and poly(ethylene oxide) by photon correlation spectroscopy (PCS), Brillouin and Raman scattering, and Quasielastic neutron scattering (QENS), using the spectrometer IRIS. The other topic is a study of pentanol, and its isomer 2-methylbutanol by depolarized low-frequency Raman scattering (Rayleigh-wing spectroscopy, RWS) and by QENS (instrument Mibemol).

The first part is a covert duplicate of at least **94ncd1**, **95pb**, **95ps1** (QENS, partly covert parallel submissions), **96jms2** (Raman), and **96mp** (viscosimetry). The second part is a covert duplicate of **93jpcm** (RWS) and **94jms1** (RWS, QENS). The original reports have several

authors, and first authors different from Magazù. Therefore, this covert compilation is also a fraudulent appropriation of work performed in significant proportions by others (perhaps the first students of Magazù).

The inset of Fig 3 is Fig 2 of **96mp**; Figs 4,5 are Figs 4,6 of **96jms2**; the inset in Fig 5 is from Tab 1 of **96jms2**; Fig 6 is Fig 1 of **95pb**; Fig 7 combines Figs 2,3 of **95pb**; Figs 8,9 are Figs 3,4 of **93jpcm**. Additionally, Figs 8,9 of **96pb** contain small tables as insets. The data in these tables are copied verbatim from **93jpcm**, Tab 1 — except for one revealing manipulation: Column 2 of Tab 1b has five five-digit entries, and one six-digit entry, 102840. In the inset in Fig 8 of **96pb**, this number is replaced by 99989 — in all likelihood just because there was not enough space for the original six-number.

1997 papers

97jpcb (#43, submitted 11apr96) **U**
α,α-Trehalose-water solutions. 1. Hydration phenomena and anomalies in the acoustic properties
S Magazù, P Migliardo, AM Musolino*, MT Sciortino
Journal of Physical Chemistry B 101 (13), 2348-2351 (1997)

Sound velocity (3 MHz, few checks up to 20 MHz) and density of T:(20,30,40,82)H at 303–358 K. Later duplicated in **98jcp** and **98ncd3**.

97jms (#44) **N**
The peculiarities of fluctuations in supercooled water
TV Lokotosh*, S Magazù, G Maisano, NP Malomuzh
Journal of molecular structure 403 (1), 143-152 (1997)

97pb1 (#45, submission undated) **U**
Selective study of the diffusive dynamics of hydration water in polymeric aqueous solutions
V Crupi*, S Magazù, D Majolino, P Migliardo, U Wanderlingh
Physica B 234 [Proceedings of the First European Conference on Neutron Scattering, Interlaken, Switzerland, oct96], 256-257 (1997)

P600:15(H,D) by QENS (IRIS). Sample temperature not specified. Very short, completely useless report.

97pb2 (#46, submission undated) **D**
Chain length dependence and H-bond effects on diffusive processes of alcohols by IQENS, DLS and NMR
S Magazù*, MP Jannelli, P Migliardo, U Wanderlingh
Physica B 234 [Proceedings as above], 355-356 (1997)

Ethanol, octanol, decanol by QNES (Mibemol), NMR, RWS. **Covert duplicate** of **96jpcm**; Tab 1 here is a subset of Tab 1 there.

97ptps1 (#47, submission undated) **U**
Diffusive Properties of α,α-Trehalose-Water Solutions
S Magazù*, G Maisano, D Majolino, P Migliardo, AM Musolino, V Villari
Progress of Theoretical Physics Supplement 126, 195-200 (1997)

T:22H by PCS and QENS (IRIS).

97ptps2 (#48, submission undated) **U**
Dynamics of H-Bonded Systems in Nanosized Pores
V Crupi, S Magazù, G Maisano, D Majolino*, P Migliardo
Progress of Theoretical Physics Supplement 126, 367-372 (1997)

Propylen glycol in GelSil by RWS. Isolated topic.

1998 papers

98jcp (#49, submitted 2apr97) **P**
Hydration and transport properties of aqueous solutions of α,α-trehalose
S Magazù, G Maisano, P Migliardo, HD Middendorf, V Villari
Journal of chemical physics 109 (3), 1170-1174 (1998)

T:*H studied by three techniques:

- Ultrasound at 3 MHz, 303–358 K. This is a **covert duplicate** of **97jpcb**. Tab 1 here is a subset of Tab 1 there.
- Viscosity at 293–358 K.
- PCS. This is a **covert duplicate** of **97ptps1**, though the data set is now much richer, covering seven different compositions.

This is a **covert parallel submission** with **98jpcb** and **98ncd3**:

98jcp	**98jpcb**	**98ncd3**
Fig 1	—	Fig 1
Fig 2	Fig 1	—
Fig 3	—	Fig 5
Fig 4*m*	Fig 4	—
Fig 4*i*	Fig 5*m*	Fig 4*m*
—	Fig 5*i*	Fig 4*i*
—	Fig 3	Fig 6

98jpcb (#50, submitted 17nov97) **P**
α,α-trehalose-water solutions. II. Influence of hydrogen bond connectivity on transport properties
S Magazù*, G Maisano, HD Middendorf, P Migliardo, AM Musolino, V Villari
Journal of Physical Chemistry B 102 (11), 2060-2063 (1998)

T:*H studied by viscosity and PCS experiments. **Covert parallel submission** with **98jcp**, as described there.

98jpcm (#51, submitted 1may98) **P**
Conformational distribution of poly(ethylene oxide) in

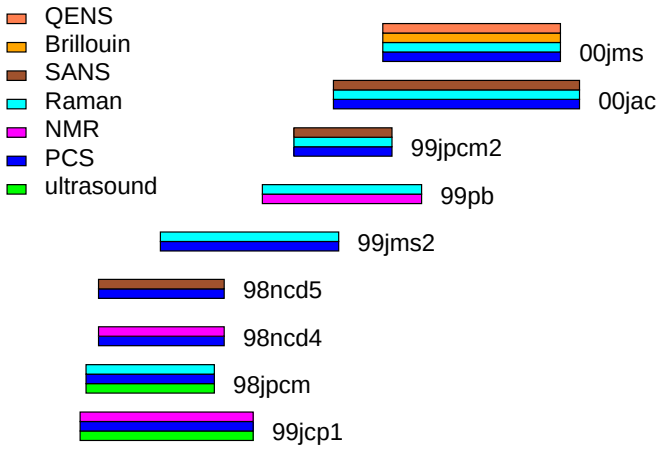

FIG. 1: Timeline of papers on poly(ethylene oxid) solutions. Bars extend from submission to publication date. Colors indicate employed experimental techniques.

molten phase and in aqueous solution by quasi-elastic and inelastic light scattering
C Branca, S Magazù, G Maisano, P Migliardo, V Villari
Journal of Physics: Condensed Matter 10 (45), 10141 (1998)

(E,P(106,200,300,400,600,900,1j,1k54,3k4))[:H] by Raman, PCS, and ultrasound. Considerable extension of earlier work (E,P(200,600,2k))[:H] by the same techniques, which is not cited. The Raman and PCS part is a **covert parallel submission** with **99jms2**; the PCS and ultrasound part with **99jcp1**; the PCS part also with **98ncd5**. See timeline (FIG 1).

98jpcm	**98ncd5**	**99jcp1**	**99jms2**
Tab 1	—	Tab 1	—
Fig 9	—	Fig 2	—
Fig 10	—	—	Fig 1
Fig 11	—	—	Fig 2
Fig 13	Fig 1	—	—
—	—	Fig 3*p*	Fig 3*i*

98ncd1 (#52) **N**
Fluctuation effects in the water-in-oil microemulsion systems near percolation threshold
AI Fisenko, S Magazù, G Maisano, NP Malomuzh
Il Nuovo Cimento D 20, 675 (1998)

98ncd2
This label is unused. It was originally used to designate V Crupi *et al.*, Il Nuovo Cimento D 20 (12bis), 2437-2458 (1998). However, Google Scholar had an author initial wrong: this paper is not coauthored by F but by P Migliardo.

98ncd3 (#53, submitted 20may98) **P**
Hydration phenomena and diffusive behaviour in trehalose aqueous solutions
S Magazù, G Maisano, P Migliardo, AM Musolino, V Villari
Il Nuovo Cimento D 20 (12bis), 2509-2519 (1998)

T:*H studied by four experimental techniques:
- Ultrasound at 3 MHz, 303–358 K. This is a **covert duplicate** of **97jpcb**. Tab 1 here is a subset of Tab 1 there.
- Viscosity at 293–358 K.
- PCS.
- Raman scattering (RWS).

This is a **covert duplicate** of **98jpcb** (for viscosity and PCS) a **covert parallel submission** with **98jcp** (ultrasound, viscosity and PCS; duplicate figures listed under **98jcp**), and a **covert parallel submission** with **99jms1**, **99jpcb**, **99jcp2**, and **99jpcm1** (Raman; duplicate figures listed under **99jpcb**).

98ncd4 (#54, submitted 20may98) **P**
Diffusive dynamics of polymeric aqueous solutions by NMR and DLS
S Magazù, G Maisano, P Migliardo, E Tettamanti, V Villari
Il Nuovo Cimento D 20 (12bis), 2521-2530 (1998)

P8k:*H by two techniques:
- PCS. Extends **98jpcm** to one more molecular weight. **Covert parallel submission** with **99jcp1**.
- NMR. **Covert parallel submission** with **99jcp1**.

Figs 1,2 contain the same data as Fig 3 in **99jcp1**. See also parallel submission timeline (FIG 1).

98ncd5 (#55, submitted 20may98) **P**
PCS and SANS studies on PEO-H2O systems
A Faraone, S Magazù, G Maisano, F Migliardo, A Triolo, R Triolo, V Villari
Il Nuovo Cimento D 20 (12bis), 2531-2540 (1998)

P3k4 by PCS and SANS (ORNL). The PCS part is a **covert parallel submission** with **98jpcm**; Fig 1 here is Fig 13 there.

98pa (#56) **N**
Fluctuation–multipole mechanism of interaction in emulsions
S Magazù, G Maisano, NP Malomuzh*, AN Morozov
Physica A 259 (3), 261-277 (1998)

98pb (#57, submission undated) **B**
Incoherent quasi-elastic neutron scattering in water-PEG solutions
V Crupi*, S Magazù, D Majolino, P Migliardo, U Wanderlingh, WW Kagunya
Physica B 241 [Proceedings of the International Conference on Neutron Scattering, Toronto, Canada aug97], 979-981 (1997)

P600:(15,30)(D,H) at 303 K by QENS (IRIS); enriched version of **97pb1**, which is cited, though the degree of overlap is concealed. Anyway, this report is too short and too light to bother.

1999 papers

99anyas (#58, submission undated) **U**
Suspended life in biological systems fragility and complexity
C Branca, A Faraone, S Magazù*, G Maisano, P Migliardo, V Villari
Annals of the New York Academy of Sciences 879 (1), 224-227 (1999)

Very short, with correct citation of experiments.

99jcp1 (#59, submitted 22apr98) **P**
The puzzle of poly(ethylene oxide) aggregation in water: Experimental findings
A Faraone, S Magazù, G Maisano, P Migliardo, E Tettamanti, V Villari
Journal of chemical physics 110 (3), 1801-1806 (1999)

(E, P(100, 200, 600, 1k, 2k, 3k4, 8k, 35k, 160k, 250k, 600k, 1M, 4M)):*H by three techniques:

- Ultrasound (3MHz). **Covert parallel submission** with **98jpcm**, as described there.
- PCS. **Covert parallel submission** with **98jpcm** (see there), **98ncd4**, and **99jms2**.
- NMR. **Covert parallel submission** with **98ncd4** (see there).

See also parallel submission timeline (FIG 1).

99jcp2 (#60, submitted 24nov98) **P**
Anomalous cryoprotective effectiveness of trehalose: Raman scattering evidences
C Branca, S Magazù, G Maisano, P Migliardo*
Journal of chemical physics 111 (1), 281-287 (1999)

Raman scattering by (M,S,T):(5,10,25)H at 293 K. This extends the data set of **99jms1** and **99jpcb** by M and S solutions, but with respect to T:*H, this is a **covert duplicate** of **99jms1**, and a **covert parallel submission** with **98ncd3**, **99jms1**, and **99jpcb**.

99jcp3 (#61, submitted 7jul99) **D**
Experimental simulation of macromolecules in trehalose aqueous solutions: A photon correlation spectroscopy study
S Magazù, G Maisano, P Migliardo*, V Villari
Journal of chemical physics 111 (19), 9086-9092 (1999)

This PCS study of the ternary system P35k:T:H starts with an investigation of T:H, and is insofar a **covert duplicate** of **98jcp** and **98jpcb**, where Fig 1 has appeared earlier.

99jml1 (#62, submission undated) **U**
Acoustic properties and molecular light scattering in alcohols
S Magazù, G Maisano, NP Malomuzh, YA Zatovsky
Journal of molecular liquids 79 (1), 27-43 (1999)

Theory. Experimental data correctly cited.

99jml2 (#63, submission undated) **U**
Dynamical response and H-bond effects in confined liquid water
V Crupi, S Magazù, D Majolino, G Maisano, P Migliardo*
Journal of molecular liquids 80 (2), 133-147 (1999)

Water in GelSil by Raman scattering including RWS.

99jms1 (#64, submitted 24aug98) **P**
On the bioprotective effectiveness of trehalose: ultrasonic technique, Raman scattering and NMR investigations
C Branca*, S Magazù, G Maisano, P Migliardo, E Tettamanti
Journal of molecular structure 480, 133-140 (1999)

T:*H by three experimental techniques:

- Ultrasound (3MHz). This is a **covert duplicate** of **97jpcb**.
- Raman scattering.
- Diffusion measurement by NMR.

The Raman part is a **covert parallel submission** with **98ncd3**, **99jpcb**, **99jcp2**. For a concordance of figures, see **99jpcb**.

99jms2 (#65, submitted 24aug98) **P**
Swelling processes in aqueous polymer solutions by PCS and Raman scattering
C Branca*, A Faraone, S Magazù, G Maisano, P Migliardo, V Villari
Journal of molecular structure 482, 503-507 (1999)

P3k4:H by Raman scattering and PCS. **Covert parallel submission** with **99jpcm2**, as described there; for the PCS part also **covert parallel submission** with **99jcp1**. See also parallel submission timeline (FIG 1).

99jpcb (#66, submitted 24aug98) **P**
α,α-Trehalose–Water Solutions. 3. Vibrational Dynamics Studies by Inelastic Light Scattering
C Branca, S Magazù, G Maisano, P Migliardo*
Journal of Physical Chemistry B 103 (8), 1347-1353 (1999)

T:H by Raman scattering. This is a **covert parallel submission** with **98ncd3**, **99jms1**, **99jcp2**, and with **99jpcm1**.

98ncd3	**99jms1**	**99jpcb**	**99jpcm1**	**99jcp2**
Fig 1	Fig 1*m*	—	—	—
Fig 2	Fig 1*i*	—	—	—
Fig 7	—	—	Fig 4	—
—	Fig 2	Fig 4	—	—
—	Fig 3*m*	Fig 6*m*	—	Fig 5*i*
—	Fig 3*i*	Fig 6*i*	—	—
—	—	Fig 5*m*	—	Fig 4*i*
—	—	Fig 5*i*	—	Fig 3a

99jpcm1 (#67, submitted 7aug98) **P**
The fragile character and structure-breaker role of alpha, alpha-trehalose: viscosity and Raman scattering findings

C Branca, S Magazù, G Maisano, P Migliardo, V Villari, AP Sokolov
Journal of Physics: Condensed Matter 11 (19), 3823 (1999)

T:*H by two experimental techniques:

- Raman scattering. Extends previous work towards low frequencies (RWS). As for the usual Raman range, Fig 5 shows isotropic spectra in the same range 3000...3800 cm^{-1} as Fig 2 in **99jpcb**. Insfar this is a **covert parallel submission** with **98ncd3**, **99jms1**, **99jpcb**, **99jcp**.
- Viscosity: **covert duplicate** of **98jcp** and **98jpcb**. Fig 2 shows the same data as Fig 4 of **98jcp** and Fig 4 **98jpcb**, now plotted as function of concentration for different temperatures, instead of the converse. The inset of Fig 2 is the inset of Fig 5 in **98jpcb**.

99jpcm2 (#68, submitted 17mar99) **P**
Can the isotopic H↔D substitution affect the conformational properties of polymeric aqueous solutions? The poly(ethylene oxide)-water case
C Branca, A Faraone, G Maisano, S Magazù, P Migliardo, A Triolo, R Triolo, V Villari
Journal of Physics: Condensed Matter 11 (32), 6079 (1999)

P3k4:(H,D) by PCS, Raman, SANS (ORNL). Compares solutions in normal and heavy water. Does not cite precedent work by the same techniques on P3k4:H, even though **98jpcm** has appeared in the same journal; Fig 5 is **covert duplicate** of Fig 4 in **99jcp1**.

Multiple **covert parallel submission**:

99jpcm2	**99pb**	**00jac**	**00jms**
Fig 3a,b	—	Fig 3a,c	—
Fig 4a,b	—	Fig 3b,d	—
—	Fig 1	—	Fig 6
Fig 7	Fig 2	Fig 4	Fig 1
Fig 8	Fig 3b	Fig 5	Fig 4

See also parallel submission timeline (FIG 1).

99mm (#69, submitted 18jun98) **P**
Experimental evidence of slow dynamics in semidilute polymer solutions
A Faraone, S Magazù, G Maisano*, R Ponterio, V Villari
Macromolecules 32 (4), 1128-1133 (1999)

Covert parallel submission with **99mmcp**: PMMA:acetone by PCS.

99mmcp (#70, submitted 7aug98) **P**
Possibilities and limits of photon correlation spectroscopy in determining polymer molecular weight distributions
A Faraone, S Magazù, G Maisano*, V Villari, G Maschio
Macromolecular Chemistry and Physics 200 (5), 1134-1142 (1999)

Covert parallel submission with **99mm**: PMMA:acetone by PCS. This paper is the richer version, with three different PMMA sets, whereas **99mm** only has one. Fig 2 is the same in both papers. The hydrodynamic radii reported in Tab 3 are the same as in Tab 1 of **99m**.

99pb (#71, submitted 29jan99) **P**
Criticism to light-heavy water substitution in structural studies of macromolecular aqueous solutions
C Branca*, S Magazù, G Maisano, P Migliardo, E Tettamanti
Physica B 270 (3), 350-359 (1999)

Covert parallel submission with **99jpcm2** (see there) and **00jac**. Fig 4 is **covert duplicate** of Fig 12 in **98jpcm**. See also parallel submission timeline (FIG 1).

2000 papers

00aipcp1 (#72, submission undated) **U**
Solute-solvent interaction strength of disaccharide aqueous solutions: Trehalose primate
C Branca, A Faraone, S Magazù, G Maisano, P Migliardo, P Mineo, V Villari
AIP Conf Proc 513 [Nuclear and Condensed Matter Physics, ed. by A. Messina], 47-50 (2000)

(M,S,T):H by density, ultrasound and DSC.

00aipcp2 (#73, submission undated) **U**
Slow dynamics features in aqueous solutions of high molecular weight poly(ethylene oxide)
A Faraone, C Branca, S Magazù, G Maisano, P Migliardo, V Villari
AIP Conf Proc 513, 118-121 (2000)

P900k:H by PCS. No adequate references to earlier work, but too insignificant a report to bother.

00aipcp3 (#74, submission undated) **B**
On the aggregation of poly(ethylene oxide) in water
S Magazù, C Branca, A Faraone, G Maisano, P Migliardo, V Villari
AIP Conf Proc 513, 146-149 (2000)

Short summary of different experiments with correct citation of **96pb**, **98jpcm**, **9jpc1**. Reference [5] is broken (cf Ref [4]). No reference in the caption of Fig 1 (derived from Figs 5,7 of **99jpcm1** and Fig 13 of **98jpcm**), hence **possible copyright infringement**.

00aipcp4 (#75, submission undated) **Q**
QENS from polymeric micelles in supercritical CO_2
R Triolo, V Arrighi, A Triolo, P Migliardo, S Magazù, JB McClain, D Betts, M DeSimone, HD Middendorf
AIP Conf Proc 513, 234-237 (2000)

Duplicates **00pb2**, possibly in form of a **covert parallel submission**. Same figures in both papers.

00aipcp5 (#76, submission undated) **D**
Influence of trehalose on conformational and dynamical

properties of poly(ethylene oxide) in water
V Villari, C Branca, A Faraone, S Magazù, G Maisano, P Migliardo
AIP Conf Proc 513, 250-256 (2000)

Covert duplicate of **99jcp3** (cited [6, in press] in the text, but not in the figure captions): Figs 1,2 here are Figs 8,6 there.

00aipcp6 (#77) **N**
Air quality control in confined spaces by means of natural ventilation
G Cannistraro, G Galli, C Giaconia, S Magazù, A Piccolo
AIP Conf Proc 513, 357-360 (2000)

00aipcp7 (#78) **N**
Design of a testing chamber for the study of material emission rates
G Cannistraro, G Galli, C Giaconia, S Magazù, A Piccolo
AIP Conf Proc 513, 361-364 (2000)

00aipcp8 (#79) **N**
Beta-ray technique applied to the study and reproduction of ancient watermarks
R Ponterio, A Buemi, G Maisano, D Majolino, F Migliardo
AIP Conf Proc 513, 389-392 (2000)

00jac (#80, submitted 17may99) **P**
Anomalous conformational properties of PEO in H_2O and D_2O by SANS, PCS and Raman scattering
C Branca, A Faraone, S Magazù*, G Maisano, P Migliardo, A Triolo, R Triolo, V Villari
Journal of applied crystallography 33 (3), 709-713 (2000)

P(3k4):200(D,H) by SANS (ORLN), PCS, Raman scattering. **Covert parallel submission** with **99jpcm2** (see there), **99pb**, and **00jms**. See also parallel submission timeline (FIG 1).

00jbp (#81, submission undated) **D**
Experimental study of the hydration properties of homologous disaccharides
C Branca, S Magazù, G Maisano, P Migliardo
Journal of biological physics 26 (4), 295-306 (2000)

Two experiments on (M,S,T):*H:
- Densities at 293–357 K.
- Ultrasound velocity (3 MHz, few measurements up to 20 MHz) at 298 K.

As far as the T:* solutions are concerned, this is a **covert duplicate** of **97jpcb**.

00jdp1 (#82, submission undated) **Q**
Diffusional and vibrational properties of water confined in very thin nanoporous glasses probed by light and neutron scattering
V Venuti, V Crupi, S Magazù, D Majolino, P Migliardo, MC Bellissent-Funel
Journal de Physique IV 10 (Pr7), 211-214 (2000)

Water in GelSil by Raman scattering (including RWS) and QENS (Mibemol). Duplicates **00jpcm** (see there), probably in form of a **covert parallel submission**.

00jdp2 (#83, submission undated) **D**
Dynamical properties of highly entangled polyalkylmethacrylate solutions: A comparative study
V Villari, A Faraone, S Magazù, G Maisano, R Ponterio
Journal de Physique IV 10 (Pr7), 321-324 (2000)

(PMMA,PEMA,PBMA):acetone by PCS: **covert duplicate** of **99mm** and **99mmcp**. Fig 1 shows a subset of data from Fig 5 of **99mm**; the inset shows three of the five data points of Fig 4 of **99mm**.

00jdp3 (#84, submission undated) **D**
Vibrational dynamics of water molecules confined within trehalose H-bond imposed networks: A Raman response
S Magazù, C Branca, A Faraone, F Migliardo, P Migliardo, V Villari
Journal de Physique IV 10 (Pr7), 329-332 (2000)

(M,S,T):H by Raman scattering. **Covert duplicate** of earlier work. The main frame of Fig 1 shows the same 10 data points as the main frame of Fig 5 in **99jcp**. The inset is the inset of Fig 6 in **99jpcb**.

00jdp4 (#85, submitted Neutron) **P**
spectroscopy of hydrated disaccharides: Trehalose vs. sucrose
S Magazù, C Branca, A Faraone, G Maisano, F Migliardo, P Migliardo, V Villari, HD Middendorf
Journal de Physique IV 10 (Pr7), 333-336 (2000)

(S,T):5H by IN6. **Covert parallel submission** with **00pb6**.

00jml (#86, submitted Polyethylene) **B**
oxide: a review of experimental findings by spectroscopic techniques
C Branca, A Faraone, S Magazù*, G Maisano, P Migliardo, V Villari
Journal of Molecular Liquids 87 (1), 21-68 (2000)

Voluminous review. Self-citations in the text, but not in the figure captions. Possibly **copyright infringement**.

00jms (#87, submitted 2aug99) **P**
NMR, static and dynamic light and neutron scattering investigations on polymeric aqueous solutions
S Magazù
Journal of Molecular Structure 523 (1), 47-59 (2000)

The abstract announces "an overview of some experimental studies", but the paper is written like an original research report, not like a review, with no adequate references to the duplicated work; the experimental section has no references at all. It describes experiments on

(E,P*):*(D,H) by Raman scattering, Brillouin scattering, PCS, and QENS (IRIS).

The Raman part, for the least, is a **covert parallel submission** with **99jpcm2**, **99pb** and **00jac**. Duplicate figures are listed under **99jpcm2**. See also parallel submission timeline (FIG 1).

00jpcb (#88) **N**
Structural and vibrational properties of trehalose: a density functional study
P Ballone*, M Marchi, C Branca, S Magazù
Journal of Physical Chemistry B 104 (26), 6313-6317 (2000)

00jpcm (#89, submitted 11aug99) **Q**
Confinement influence in liquid water studied by Raman and neutron scattering
V Crupi, S Magazù, D Majolino, P Migliardo, V Venuti, MC Bellissent-Funel
Journal of Physics: Condensed Matter 12 (15), 3625 (2000)

Water in GelSil by Raman scattering and QENS (Mibemol). Duplicates **00jdp1**, probably in form of a **covert parallel submission**. Figs 2,4 here are Figs 2,3a there.

00pb1 (#90, submission undated) **P**
Effects of isotopic substitution on the conformational properties of polymeric aqueous solutions
C Branca, A Faraone*, S Magazù, G Maisano, P Migliardo, A Triolo, R Triolo, V Villari
Physica B 276 [Proceedings of ECNS '99], 332-333 (2000)

Brief report about three experiments on P:*(D,H):

- SANS (ORNL): **Covert parallel submission** with **00jac**: Fig 1 here is Fig 1b there.
- PCS.
- Raman scattering: **99jpcm** is cited, though not in the caption of Fig 2, which is Fig 7 there, hence possible **copyright infringement**.

00pb2 (#91, submission undated) **Q**
QENS from polymer aggregates in supercritical CO_2
R Triolo, V Arrighi, A Triolo*, P Migliardo, S Magazù, JB McClain, D Betts, JM DeSimone, HD Middendorf
Physica B 276 [Proceedings as above], 386-387 (2000)

Duplicates **00aipcp4**, possibly in form of a **covert parallel submission**. Same figures in both papers.

00pb3 (#92) **N**
Dynamical study of confined ethylene glycol by IQENS
V Crupi*, S Magazù, D Majolino, P Migliardo, MC Bellissent-Funel
Physica B 276, 417-418 (2000)

00pb4 (#93) **N**
Diffusive dynamics in trehalose aqueous solutions by QENS
S Magazù*, RE Lechner, S Longeville, G Maisano, D Majolino, P Migliardo, U Wanderlingh
Physica B 276 [Proceedings as above], 475-476 (2000)

Extremely short report on T:(20,30)(D,H) by QENS (NEAT) and NMR. Too unsubstantial to bother.

00pb5 (#94) **N**
QENS and PCS study of aqueous BSA–PEO 'crowded' solutions
A Faraone*, C Branca, S Magazù, G Maisano, HD Middendorf, P Migliardo, V Villari
Physica B 276 [Proceedings as above], 524-525 (2000)

00pb6 (#95, submitted 29jan99) **P**
Molecular dynamics of disaccharides by inelastic light scattering
HD Middendorf, S Magazù*, C Branca, A Faraone, G Maisano, P Migliardo, E Tettamanti
Physica B 276 [Proceedings as above], 526-527 (2000)

INS (IN6) measurement of (S,T):5H at 200–400 K. Figs 1,2 here are Figs 1a,b there.

00pb7 (#96, submitted 22mar99) **D**
Anomalous translational diffusive processes in hydrogen-bonded systems investigated by ultrasonic technique, Raman scattering and NMR
C Branca*, S Magazù, G Maisano, P Migliardo, E Tettamanti
Physica B 291 (1), 180-189 (2000)

Covert compilation of experiments on T:*H.

- Ultrasound (3Mz, few measurements up to 20 MHz). **Covert duplicate** of **97jpcb**; Fig 1 here shows half of the data points of Fig 5 there.
- Raman. Tab 1 is a **covert duplicate** of Fig 6 in **99jpcb**.
- Diffusion measurements by NMR.

00pre (#97) **N**
Nature of self-diffusion and viscosity in supercooled liquid water
TV Lokotosh, S Magazù, G Maisano, NP Malomuzh
Physical Review E 62 (3), 3572 (2000)

2001 papers

01jcp (#98, submitted 20feb01) **U**
Quasielastic neutron scattering from trehalose aqueous solutions
A Faraone, S Magazà[sic]*, RE Lechner, S Longeville, G Maisano, D Majolino, P Migliardo, U Wanderlingh
Journal of Chemical Physics 115 (7), 3281-3286 (2001)

T:(20,30)H, T:(20,30,40,60,82)D at 333K by NEAT. Precedent report **00pb4** is ignorable.

01jml1 (#99, submission undated) **D**
New experimental results in physics of liquids
S Magazù, G Maisano
Journal of Molecular Liquids 93 (1) [Special Problems in Physics of Liquids. International Conference dedicated to the memory of Professor I.Z. Fisher, Odessa, Ukraine jun99], 7-27 (2001)

Review. Experiments by others are correctly cited, including references in the figure captions. When it comes to own work, citations become sparse, and are absent from figure captions, which qualifies them as **covert duplicates** (copyright infringement, appropriation of work done by former collaborators): Fig 10 is Fig 2 of **aipcp2**; Figs 11a,b are Figs 3,4 of **94jms2**; Fig 13 is Fig 2 of **99jms2**; Fig 14 is Fig 5 of **99jpcm2**.

01jml2 (#100, submission undated) **D**
Diffusive dynamics: self vs. collective behaviour
C Branca, A Faraone, T Lokotosh, S Magazù, G Maisano, NP Malomuzh, P Migliardo, V Villari
Journal of Molecular Liquids 93 (1) [Conference as above], 139-149 (2001)

P8k:*H by PCS and NMR. **Covert duplicate** of earlier publications, e. g. **99jcp1**: Fig 1 here is Fig 3 there.

01jpcb1 (#101, submitted 15jun00) **P**
Diffusive dynamics of water in the presence of homologous disaccharides: A comparative study by quasi elastic neutron scattering. IV.
S Magazù, V Villari, P Migliardo*, G Maisano, MTF Telling
Journal of Physical Chemistry B 105 (9), 1851-1855 (2001)

(M,S,T):20(D,H) at 323 K by QENS (IRIS). This is a **covert parallel submission** with **01pb2**, as described there.

01jpcb2 (#102, submitted 12oct00) **P**
Analysis of the Diffusive Properties of Vitamin C Aqueous Solutions by Quasi Elastic Neutron Scattering. 1.
S Magazù, F Migliardo*, P Migliardo
Journal of Physical Chemistry B 105 (13), 2612-2617 (2001)

Aqueous 1:25 solution of vitamin C by QENS (IRIS) at 306 K. **Covert parallel submission** with **01pb5** (see there). Many years later duplicated in **08cp3**.

01jcpb3 (#103, submitted 17jan01) **P**
α,α-Trehalose/water solutions. 5. Hydration and viscosity in dilute and semidilute disaccharide solutions
C Branca, S Magazù, G Maisano, F Migliardo, P Migliardo*, G Romeo
Journal of Physical Chemistry B 105 (41), 10140-10145 (2001)

(M,S,T):*H by three experimental techniques:

- Density. **Duplicate parallel submission** with **01ps**: Tabs 1 largely overlap (here one more concentration, there two more temperatures).
- Sound velocity (3 MHz, some checks up to 20 MHz) at 293–258 K. **Covert duplicate** of **00aipcp1** (Fig 5 here is Fig 1 there). As for T:*H, this is a **covert duplicate** of earlier work, e. g. **97jpcb**.
- Viscosity. As for T:*H, this is a **covert duplicate** of earlier work, e. g. **98ncd3**.

01jcpb4 (#104, submitted 5apr01) **U**
An integrated quasi-elastic light-scattering, pulse-gradient-spin-echo study on the transport properties of α,α-trehalose, sucrose, and maltose deuterium oxide solutions
E Iannilli, E Tettamanti, L Galantini*, S Magazù
Journal of Physical Chemistry B 105 (48), 12143-12149 (2001)

Experiments on (M,S,T):D by PCS and NMR. With proper citation of precedent work.

01mclc1 (#105) **N**
Conformational studies of poly(ethylene oxide) in crystalline, molten, and solution phase
C Branca, S Magazù, G Maisano, F Migliardo, P Migliardo, G Romeo, B Vertessy
Molecular Crystals and Liquid Crystals 372 (1), 17-23 (2001)

01mclc2 (#106, submission undated) **D**
Hydration properties of disaccharide aqueous solutions
C Branca, S Magazù, G Maisano, F Migliardo, P Migliardo, G Romeo, E Vorobieva
Molecular Crystals and Liquid Crystals 372 (1), 25-35 (2001)

Experimental study of (M,S,T):*H by three techniques:

- Density. **Covert duplicate** of **00aipcp1**; Fig 2 here is Fig 1 there. Possibly **covert parallel submission** with **01ps**.
- Ultrasound (3Mz, few measurements up to 20 MHz). Just a blunder? Experiment described, but no results communicated.
- Raman. **Covert duplicate** of **99jpcb**; same Tab 1 in both papers.

01pb1 (#107, submission undated) **P**
Comparison of disaccharide solutions across glass transition
S Magazù*, C Branca, A Faraone, F Migliardo, P Migliardo, G Romeo
Physica B 301 (1) [Proceedings of the Fifth International Workshop on Quasi-Elastic Neutron Scattering, aug00], 126-129 (July 2001)

(S,T):19H by QENS(Mibemol, 5 Å) at 88, 203, 233, 263, 283 K. **Covert parallel submission** with **01prb**.

01pb2 (#108, submission undated) **P**
Quasielastic neutron scattering study on disaccharide aqueous solutions

S Magazù*, V Villari, P Migliardo, G Maisano, MTF Telling, HD Middendorf
Physica B 301 (1) [Proceedings as above], 130-133 (2001)

(M,S,T):20(D,H) by QENS (IRIS). **Covert parallel submission** with **01jpcb1**. Fig 1 here is composed of Figs 2,3 there. The discussion is also largely duplicate; Eqs 1,2 here are Eqs 6,9 there.

01pb3 (#109) **N**
QENS study of trehalose/water/acrylamide–acrylic acid
S Magazù*, C Branca, F Migliardo, P Migliardo, E Vorobieva, U Wanderlingh
Physica B 301 (1) [Proceedings as above], 134-137 (2001)

01pb4 (#110, submission undated) **Q**
Study of L-ascorbic acid (vitamin C)/H_2O mixture across glass transition
F Migliardo*, C Branca, A Faraone, S Magazù, P Migliardo
Physica B 301 (1) [Proceedings as above], 138-140 (2001)

Aqueous 1:32 solution of vitamin C by INS (Mibemol). Later duplicated (possibly **covert parallel submission**) in **02jcns**.

01pb5 (#111, submission undated) **P**
Diffusive properties of Vitamin C aqueous solutions by quasielastic neutron scattering
F Migliardo*, S Magazù, P Migliardo
Physica B 301 (1) [Proceedings as above], 141-144 (2001)

Aqueous 1:25 solution of vitamin C by QENS (IRIS). **Covert parallel submission** with **01jpcb1**. Figs 2a,2b,3 here are Figs 3c,6c,4 there.

01prb (#112, submitted 12dec00) **P**
Vibrational and relaxational contributions in disaccharide/H_2O glass formers
C Branca, S Magazù*, G Maisano, F Migliardo
Physical Review B 64 (22), 224204 (2001)

(S,T):19(D,H) by QENS (Mibemol, 5 Å) at 88, 203, 233, 263, 283 K. **Covert parallel submission** with **01pb1**. Fig 7 is Fig 2 of **01pb1**, except for the inset. Later duplicated by **02apa1** and **03cp2**.

01ps (#113, submitted 15dec05) **P**
Comparison of thermophysical properties in disaccharide aqueous solutions
C Branca, S Magazù*, G Maisano, P Migliardo, PG Mineo
Physica Scripta 64 (4), 390 (2001)

(M,S,T):H by four experimental techniques:

- Density. Extended **covert duplicate** of **00jbp**: Figs 1–5 are identical. And **duplicate parallel submission** with **01ps**: Tabs 1 largely overlap (here two more temperatures, there one more concentration).
- Ultrasound. No data shown.
- DSC. **Covert duplicate** of **00aipcp1**. Fig 6 here is Fig 2 there (possibly with another concentration).
- Thermogravimetry (TGA).

2002 papers

02apa1 (#114, submitted 25jul01) **D**
Characterization of 'strong–fragile' behaviour of glass-forming aqueous solutions by neutron scattering
C Branca, A Faraone, G Galli, S Magazù*, G Maisano, F Migliardo
Applied Physics A 74 (1), s448-s449 (2002)

(S,T):(10,19)H by QENS (Mibemol, 5 Å) at 88, 203, 233, 263, 283K. **Covert duplicate** of previous reports [**01prb** and **01pb1**] on the *19H experiment. Fig 1 is basically Fig 1a of **01prb**. Later duplicated by **03cp2**.

02apa2 (#115, submitted 25jul01) **Q**
Study on Destructuring effect of trehalose on water by neutron diffraction
C Branca, V Magazù, G Maisano, F Migliardo*, AK Soper
Applied Physics A 74 (1), s450-s451 (2002)

Neutron diffraction (SANDALS) on (S,T):(20,40)(D,D/H,H) at 300, 340 K. Duplicates **02pa2**, possibly in form of a **covert parallel submission**. Later duplicated in **03jml1**.

02apa3 (#116, submitted 25jul01) **U**
Neutron-scattering study of the vibrational behavior of trehalose aqueous solutions
C Branca, S Magazù, F Migliardo, G Romeo*, V Villari, U Wanderlingh, D Colognesi
Applied Physics A 74 (1), s452-s453 (2002)

Initial report on T[:(10,20)H] by INS (TOSCA, 20 K) and FTIR (Bomem DA8).

02apa4 (#117, submitted 25jul01) **U**
Characterization of conformational properties of protein/trehalose/water system by neutron scattering
A Brandt, S Magazù, A Mangione, F Migliardo*, BG Vertessy
Applied Physics A 74 (1), s457-s458 (2002)

U:D[:T] by SANS (V4 at BENSC). Later duplicated in **03mmbs**.

02apa5 (#118, submitted 18jul01) **U**
Analysis of changes of vibrational properties of water in the presence of disaccharides
C Branca, S Magazù, G Maisano, F Migliardo, G Romeo*, SM Bennington, B Fåk, E Bellocco, G Laganà
Applied Physics A 74 (1), s459-s460 (2002)

H, (S,T):10H at 273K by INS (MARI). Very short account, later replaced by richer data set in **03jpcb**.

02apa6 (#119, submitted 19jul01) **U**
Characterization of trehalose aqueous solutions by neutron spin echo

C Branca*, A Faraone, S Magazù, G Maisano, A Mangione, C Pappas, ...
Applied Physics A 74 (1), s461-s462 (2002)

T:19H by SPAN. Later duplicated in **04pb1**.

02cmp (#120, submitted 4feb02) **U**
Star polymer/water solutions: new experimental findings
C Branca, S Magazù, F Migliardo
Condens Matter Phys 5, 275-284 (2002)

A review with correct citations. Even a "copyright permission" has been obtained.

02jcp (#121, submitted 9jul01) **U**
Effect of the monomer structure on the dynamics of semidilute polyalkylmethacrylate solutions: A quasielastic light and neutron scattering investigation
S Magazù, V Villari, A Faraone, G Maisano, S Janssen
Journal of chemical physics 116 (1), 427-435 (2002)

(PMMA,PEMA,PBMA):acetone by PCS and QENS (FOCUS). The PMMA/PCS part extends earlier work **99mm**, **99mmcp**, which is properly cited.

02jncs (#122, submission undated) **Q**
Analysis of the L-ascorbic acid/water interaction by neutron scattering
C Branca, S Magazù*, F Migliardo, G Romeo
Journal of non-crystalline solids 307, 878-881 (2002)

Aqueous 1:32 solution of vitamin C by INS (Mibemol) at 88–289 K. **Covert duplicate** of **01pb4** and of a part of **02pa1** (possibly in form of **covert parallel submission**).

02jpcb1 (#123) **N**
α,α-trehalose-water solutions VI. A view of the structural and dynamical properties of OβG micelles in the presence of trehalose
S Magazù*, V Villari, A Faraone, G Maisano, RK Heenan, S King
Journal of Physical Chemistry B 106 (27), 6954-6960 (2002)

02jpcb2 (#124, submitted 29nov01) **P**
Hydration study of PEG/water mixtures by quasi elastic light scattering, acoustic and rheological measurements
C Branca, S Magazù, G Maisano, F Migliardo, P Migliardo**, G Romeo
Journal of Physical Chemistry B 106 (39), 10272-10276 (2002)

P*:H by ultrasound (3MHz, few checks up to 20MHz), PCS, and viscosity measurements. The viscosity part is a **covert parallel submission** with **02ps**. Later duplicated (possible **covert parallel submission**) by **03jml4**.

02pa1 (#125, submission undated) **Q**
Quasielastic and inelastic neutron scattering study of vitamin C aqueous solutions
F Migliardo*, C Branca, S Magazù, P Migliardo, S Coppolino, A Villari, N Micali
Physica A 304 (1), 294-298 (2002)

Covert compilation of neutron scattering experiments on vitamin C:
- IRIS: **Covert duplicate** of **01pb5** and **01jpcb2**. Fig 1 is Fig 3 in **01pb5** and Fig 4 in **01jpcb2**.
- Mibemol: **Covert duplicate** of **01pb4** and **02jncs** (possibly in form of **covert parallel submission**).

02pa2 (#126, submission undated) **Q**
Destructuring effect of trehalose on the tetrahedral network of water: a Raman and neutron diffraction comparison
C Branca*, S Magazù, F Migliardo, P Migliardo
Physica A 304 (1), 314-318 (2002)

Covert compilation of experiments on T*H:
- Neutron diffraction (SANDALS) on T:(20,40)(H,H/D,D) at 300 K. Duplicates **02apa2**, possibly in form of a **covert parallel submission**. Same Fig 1 in both papers.
- Raman scattering. **Covert duplication** of earlier work. Fig 2 is the inset of Fig 6 in **99jpcb**.

02ps (#127, submitted 29nov02) **P**
Hydration parameters of aqueous solutions of poly(ethylene glycol)s by viscosity data
C Branca, S Magazù, G Maisano, P Migliardo, F Migliardo, G Romeo
Physica Scripta 66 (2), 175 (2002)

P(200,400,600,1k,2k,3k):H by viscosity and density measurements. The viscosity measurement is a **covert parallel submission** with **02jpcb2**, though the data analysis is far more elaborate here than there. Fig 7 shows data from the last column of Tab 1 in **02jpcb2**.

2003 papers

03cp1 (#128, submitted 3oct02) **U**
Temperature dependence of mean square displacement by IN13: a comparison between trehalose and sucrose water mixtures
S Magazù*, F Migliardo, C Mondelli, G Romeo
Chemical physics 292 (2), 247-251 (2003)

This is the first report about (S,T):19D by ENS (IN13), later duplicated many times.

03cp2 (#129, submitted 2oct02) **D**
Fragility characterization of disaccharide/water glass-forming systems by QENS
C Branca, S Magazù*, G Maisano
Chemical physics 292 (2), 341-345 (2003)

Covert duplicate of the experiment on (S,T):19H at 88, 203, 233, 263, 283 K by QENS (Mibemol, 5 Å), previously described in **01pb1**, **02apa1** (both not cited),

and **01prb** (cited in the discussion, but neither in the introduction nor in the experimental section). Fig. 1 is Fig. 2 of **01pb1**.

03jcp (#130, submitted 14jul03) **P**
Elastic incoherent neutron scattering from homologous disaccharides/H_2O mixtures
S Magazù*, F Migliardo, C Mondelli
Journal of chemical physics 119 (24), 13033-13038 (2003)

Covert parallel submission with **04bpj** and **04jpcb1**. These are the first reports on (M,S,T):19H by ENS (IN13), later duplicated many times.

The following five publications all report elastic neutron scattering scans with instrument IN13 on 1:19 aqueous solutions of maltose (M), sucrose (S), and α,α-trehalose (T):

paper	received	published
04jpcb1	9jul03	sep04
03jcp	14jul03	22dec03
04bpj	18jul03	may04
04pb4	sep03 ?	15jul04
04pccp	20oct03	12jan04

(The reception date of **04pb4** is unknown, but can be approximated by a conference date, since it appeared as part of the proceedings. The publication date refers to the online publication when known.)

The experimental sections describe overlapping data sets. All of them have 1:19 solutions of S and T. **04jpcb1** additionally has 1:6 solutions; the other four papers feature M along with S and T. **04bpj** and **04pccp** also duplicate heavy-water solution data from **03cp1**. Figures are heavily reused, often verbatim, often trivially modified. As far as the 1:19 solutions of S and T are concerned, the figures are reused as follows:

03jcp	**04bpj**	**04jpcb1**	**04pb4**	**04pccp**
Fig 1	Fig 2	Fig 1	—	—
Fig 2	Fig 1*m*	Fig 2*m*	Fig 1*m*	Fig 1
—	Fig 1*i*	Fig 2*i*	—	
Fig 3	—	—	Fig 2	Fig 2
Fig 4a-c	Fig 3	Fig 3*m*	Fig 3a-c	Fig 4*m*
—	Fig 4	Fig 4	—	—
—	Fig 5b	Fig 5	—	—

The theory section of **03jcp** is a **covert parallel submission** with **04pb4** (as described there), **04pccp**, and **04jpcb1**.

On p 13037, there is a misleading reference to "experimental data for selenium of Migliardo[31] and Magazù[32]", with ref 31 G Galli, P Migliardo, R Bellissent, and W Reichardt, and ref 32 E Burattini, M Federico, G Galli, S Magazù, and D Majolino. This is an indecent appropriation of collective work, and differently from what the text, coauthored by Federica Migliardo, seems to suggest, ref 31 was not written by her but coauthored by her father Placido.

03jml1 (#131, submission undated) **D**
Experimental evidences of structural changes in trehalose/water mixtures
C Branca, S Magazù*, F Migliardo, G Romeo
Journal of molecular liquids 103 [27th International Conference on Solution Chemistry, Vaals, aug01], 169-171 (2003)

Covert duplicate of **02apa2**: same neutron diffraction experiment (SANDALS) on T:(20,40)(D,D/H,H) at 300, 340 K.

03jml2 (#132, submission undated) **D**
Vibrational dynamics in hydrogen bonded systems
C Branca, S Magazù, F Migliardo, G Romeo
Journal of molecular liquids 103 [conference as above], 173-176 (2003)

T:*H by FTIR (Bomem DA8). **Covert duplicated** of **02apa3**: Fig 1 here and Fig 1 show overlapping parts of the same spectrum. The old data set is enriched by other concentrations.

03jml3 (#133, submission undated) **D**
Homologous disaccharide properties at low temperatures
L Abate, I Blanco, C Branca, S Magazù, G Maisano, F Migliardo, PG Mineo, G Romeo
Journal of molecular liquids 103 [conference as above], 177-180 (2003)

(M,S,T):*H by DSC. **Covert duplicate** of **00aipcp1** and **01ps**, now showing both concentrations.

03jml4 (#134, submission undated) **Q**
Water poly(ethylene glycol) coordination by rheological and acoustic data
C Branca, S Magazù, F Migliardo, G Romeo
Journal of molecular liquids 103 [conference as above], 181-185 (2003)

Sound velocity and viscosity of P(200,400,600,1k,2k). **Covert duplicate** (possible **covert parallel submission**) of **02jpcb2**; Figs 1,2 here are Figs 2,4 there.

03jpcb (#135, submitted 7jun02) **D**
Vibrational studies on disaccharide/H_2O systems by inelastic neutron scattering, Raman, and IR spectroscopy
C Branca, S Magazù*, G Maisano, SM Bennington, B Fåk
Journal of Physical Chemistry B 107 (6), 1444-1451 (2003)

Enriched covert compilation of experiments on (T,S):*H:

- INS (MARI). Supersedes an older experiment **02apa5** (which nevertheless should have been cited) with a richer data set at 293 K.
- Raman scattering.
- FTIR. **Covert duplicate** of **02apa3** and **03jpcb**: Fig 5b shows a broadband IR spectrum that combines the subbands shown in Fig 1 of **02apa3** and Fig 1 of **03jpcb**.

03mmbs (#136, submitted 23apr03) **D**
Structure of Escherichia coli dUTPase in solution: A small angle neutron scattering study
BG Vertesse, S Magazù*, A Mangione, F Migliardo, A Brandt
Macromolecular bioscience 3 (9), 477-481 (2003)

U:D[:T] by SANS (V4 at BENSC). **Covert duplicate** of **02apa4**. The figures cover another q range; perhaps the experiment has been repeated. Nevertheless, a reference to the first publication of a SANS experiment on the same system would have been mandatory.

03ps (#137, submitted 29may02) **U**
Study of conformational properties of poly(ethylene oxide) by SANS and PCS techniques
C Branca, S Magazù, G Maisano, F Migliardo, P Migliardo, G Romeo
Physica Scripta 67 (6), 551 (2003)

P600k by SANS (LOQ) and PCS.

2004 papers

04bpj (#138, submitted 18jul03) **P**
Mean-square displacement relationship in bioprotectant systems by elastic neutron scattering
S Magazù*, G Maisano, F Migliardo, C Mondelli
Biophysical journal 86 (5), 3241-3249 (2004)

Enriched covert compilation of IN13 scans on different samples. The experimental sections promises 12 samples (M,S,T):(6,19)(D,H). From the analysis, however, it appears that only seven samples have been measured: (M,S,T):19H, (S,T):6H, (S,T):19D.

- As for (M,S,T):19H, this is a **covert parallel submission** with **04jpcb1** and **03jcp**, as described under **03jcp**.
- As for (S,T):19D, this is a **covert duplicate** of **03cp1**.
- The data on (S,T):6H are new; they are duplicated a number of times in later publications.

04drm1 (#139) **N**
Photon correlation spectroscopy and small angle neutron scattering studies on fullerene in solution
C Branca, V Magazù, A Mangione, F Migliardo, G Romeo
Diamond and related materials 13 (4), 1333-1336 (2004)

04drm2 (#140) **N**
Structural and vibrational properties of carbon nanotubes by TEM and infrared spectroscopy
C Branca, C Corsaro, F Frusteri, V Magazù, A Mangione, F Migliardo, U. Wanderlingh
Diamond and related materials 13 (4), 1249-1253 (2004)

04jcp (#141, submitted 7may04) **D**
Fragility by elastic incoherent neutron scattering
S Magazù*, G Maisano, F Migliardo
Journal of chemical physics 121 (18), 8911-8915 (2004)

Covert duplicate of **03jcp** and **04bpj**: The experimental section speaks vaguely of (M,S,T):*H "as function of concentration", investigated by ENS (IN13); data are shown for (M,S,T)19H and (S,T):6H.

Fig 1 is Fig 2 of **03jcp**, rescaled and with new inset. Fig 4 is Fig 2a of **04bpj**. Tab 1 and Fig 3 include data for (S,T):6D (cf. **04bpj**) with experiments neither described nor cited.

04jml1 (#142, submission undated) **U**
Structural properties of C60 in solution
F Migliardo*, V Magazù, M Migliardo
Journal of molecular liquids 110 (1), 3-6 (2004)

04jml2 (#143, submission undated) **D**
Elastic incoherent neutron scattering studies on glass forming hydrogen-bonded systems
F Migliardo*, S Magazù, C Mondelli
Journal of molecular liquids 110 (1) [Novel Approaches to the Structure and Dynamics of Liquids: Experiments, Theories, and Simulations. Rhodos, sep02], 7-10 (2004)

Covert duplicate of **03jcp**, describing an experiment on (S,T):19D by ENS (IN13). No cross-references to other IN13/sugar papers, except one reference in the conclusion: [21] Biophys. J., in press, cited for "protonated" samples, though in reality **04bpj** also reports on deuterated samples.

Fig 1 is Fig 2 of **03jcp**; Fig 2 shows $\langle u^2 \rangle$ vs T as in Fig 4 of **03jcp**, but with other binning.

04jml3 (#144, submission undated) **B**
INS investigation on disaccharide/H_2O mixtures
F Migliardo*, V Magazù, M Migliardo
Journal of molecular liquids 110 (1) [conference as above], 11-13 (2004)

(M,S,T):19H at unspecified temperature by TOSCA. No reference to previous study **02apa3**.

04jms1 (#145, submitted 30oct03) **D**
Scattering findings on disaccharide/water mixtures
S Magazù*, C Branca, F Migliardo, G Romeo, A Mangione
Journal of molecular structure 700 (1) [Horizons in Hydrogen Bond Research. A collection of Papers from the XVth International Conference, Berlin, sep03], 211-215 (2004)

Covert compilation of experiments on sugar solutions:

- TOSCA: Experimental section says T:2H, but Fig 2 shows (M,S,T):19H data from Fig 2a-c of **04jml3** (not cited).
- (T,S):10H and pure water at 293 K by MARI: **covert duplicate** of **03jpcb**; Fig 3 is Fig 3 of **03jpcb**.

- (T,S):19H at 88, ..., 283 K by Mibemol: **covert duplicate** of **01prb**; Fig 6 is Fig 1 of **01prb**.
- (M,S,T):*(D,H) by IRIS: **covert duplicate** of **01jpcb1**; Tab 2 compiles data from p 1854 of **01jpcb1**.

04jms2 (#146, submitted 29sep13) **D**
An elastic neutron scattering on dynamical transition in hydrogen-bonded systems
S Magazù*, G Maisano, F Migliardo, C Mondelli, G Romeo
Journal of molecular structure 700 (1) [Collection as before], 225-227 (2004)

Covert duplicate of **03cp1**, describing an experiment on (M,S,T):19H by ENS (IN13).

Experimental section: (S,T):19D by IN13 ⇒ **covert duplicate** of 03cp1

04jms3 (#147, submitted 8oct03) **D**
INS investigation of disaccharide/H_2O mixtures
C Branca, S Magazù*, G Maisano, A Mangione, SM Bennington, J Taylor
Journal of molecular structure 700 (1) [Collection as before], 229-231 (2004)

H; (S,T):(10,13)H at 293, 313 K by INS (MARI). **Covert reanalysis** of an experiment already published, at least in part, in **03jpcb**. Fig 1 here is Fig 14 there.

04jpcb1 (#148, submitted 9jul03) **P**
α,α-trehalose/water solutions. VII: an elastic incoherent neutron scattering study on fragility
S Magazù*, G Maisano, F Migliardo, C Mondelli
Journal of Physical Chemistry B 108 (36), 13580-13585 (2004)

Covert parallel submission with **03jcp** and **04bpj**, as described under **03jcp**. Describes experiments on (M,S,T):(6,19)(D,H) by ENS (IN13), but data are shown for 7 samples only (as in **04bpj**). Fig 1 is Fig 2 of **04bpj**, except for minor change of 3d representation; Fig 5 is Fig 5b of **04bpj**.

The theory section is a **covert parallel submission** with **03jcp**, **04pb4** (as described there), and **04pccp**.

Note also an incorrect citation: **03jcp** (Eq 9) and **04jcp** (Eq 7) correctly attribute an approximation for the viscosity

$$\eta = \eta_0 \exp[u_0^2/\langle u^2\rangle_{\rm loc}] \qquad \text{(B1)}$$

to Buchenau & Zorn (1992). In **04bpj**, the citation is less clear, and here, it is attached to a data set, and no longer to the formula.

04jpcb2 (#149, submitted 26apr04) **U**
Temperature evolution of the diffusive dynamics of disaccharide aqueous solutions by quasielastic neutron scattering
C Branca, S Magazù*, G Maisano, MTF Telling
Journal of Physical Chemistry B 108 (44), 17069-17075 (2004)

(S,T):*(D,H) by QENS (OSIRIS).

04pb1 (#150, submission undated) **B**
A quasi-elastic neutron scattering and neutron spin-echo study of hydrogen bonded system
C Branca, A Faraone, S Magazù, G Maisano, A Mangione*
Physica B 350 (1) [Proceedings of the Third European Conference on Neutron Scattering, Montpellier, sep03], e355-e357 (2004)

This report on T:*H experiments by NSE (SPAN) and QENS (NEAT, Mibemol) is **borderline** to a **covert compilation**, with correct citation of the original Mibemol experiment **01prb**, and badly placed citations of the original NEAT **01jcp** and SPAN **02apa6** reports.

04pb2 (#151, submission undated) **D**
Comparative study of structural properties of trehalose water solutions by neutron diffraction, synchrotron radiation and simulation
A Cesaro, V Magazù, F Migliardo, F Sussich, M Vadalà*
Physica B 350 (1) [Proceedings as above], e367-e370 (2004)

Covert duplicate of **02apa2** and **03jml1**: same neutron diffraction experiment (SANDALS) on T:(20,40)(D,D/H,H) at 300, 340 K.

04pb3 (#152, submission undated) **D**
Vibrational studies on disaccharide/H_2O systems
C Branca*, S Magazù, G Maisano, A Mangione, SM Bennington, J Taylor
Physica B 350 (1) [Proceedings as above], e371-e373 (2004)

Covert reanalysis of INS (MARI) measurement of water and (S,T):10H. Data shown in Figs 2a,b have previously appeared in Figs 9a,10a of **03jpcb**. Note however that the concentration indicated inside Figs 2a,b does not match the figure caption.

04pb4 (#153, submission undated) **P**
Harmonic–anharmonic transition in disaccharides/H_2O mixtures by EINS
S Magazù, F Migliardo*, C Mondelli
Physica B 350 (1) [Proceedings as above], e375-e378 (2004)

Covert duplicate of **03cp1** and **03jcp** / **04bpj** / **04jpcb1** (none of them cited), describing experiments on (M,S,T):19(D,H) by ENS (IN13). Figs 2,3 are Figs 3,4 of **03jcp**.

The theory section is a **covert parallel submission** with **03jcp**, **04pccp**, and **04jpcb1**. **04pb4** has on p e378: "In the following, we will introduce a new numerical parameter in order to evaluate the 'fragility' degree of the investigated systems as follows:"

$$M = \left.\frac{\mathrm{d}(u_0^2/\langle u^2\rangle_{\rm loc})}{\mathrm{d}(T_{\rm g}/T)}\right|_{T=T_{\rm g}^+}. \qquad \text{(B2)}$$

03jcp (Eq 10), **04pccp** (Eq 6) and **04jpcb1** (Eq 9) equally introduce this as "a new operative definition".

04pb5 (#154) **N**
Small-angle neutron scattering and inelastic neutron scattering studies on β-cyclodextrins and hydroxypropyl-β-cyclodextrins
S Maccarrone*, S Magazù, F Migliardo, FM Mondio
Physica B 350 (1) [Proceedings as above], e615-e618 (2004)

04pccp (#155, submitted 20oct03) **D**
An EINS study on the fragility of homologues disaccharides/H_2O mixtures
S Magazù, G Maisano, F Migliardo, C Mondelli
Physical Chemistry Chemical Physics 6 [81st International Bunsen Discussion Meeting on Interfacial Water in Chemistry and Biology], 1962-1965 (2004)

Covert duplicate of **03cp1** and **03jcp** / **04bpj** / **04jpcb1** (none of them cited), describing experiments on (M,S,T):*(D,H) solutions (unspecified concentration) by ENS (IN13). Figs 1,2 are Figs 2,3 of **03jcp**.

The theory section is a **covert parallel submission** with **03jcp**, **04pb4** (as described there), and **04jpcb1**.

2005 papers

05chr (#156, submitted 26nov04) **D**
Correlation between bioprotective effectiveness and dynamic properties of trehalose–water, maltose–water and sucrose–water mixtures
S Magazù*, F Migliardo, C Mondelli, M Vadala
Carbohydrate research 340 (18), 2796-2801 (2005)

Covert duplicate of earlier IN13/sugar papers (see **03jcp**). Describes experiment on (M,S,T):*(D,H) by ENS (IN13) over 20–450K, but data are only shown for (M,S,T):19H up to 320K. Fig 1 is Fig 1 of **04bpj**, Fig 2 is Fig 3 of **03jcp**. Fig 3 is Fig 3 of **04bpj** with an inset based on Fig 2 of **03cp1**.

05cp (#157, submitted 20dec04) **P**
A combined neutron scattering and simulation study on bioprotectant systems
F Affouard, P Bordat, M Descamps, A Lerbret, S Magazù, F Migliardo*, AJ Ramirez-Cuesta, MTF Telling
Chemical physics 317 (2), 258-266 (2005)

Substantially enriched covert compilation of experiments and MD simulations about (S,T):19(D,H),

- The IRIS data on T:19(D,H) at 295, 308, 320 K are new, though it would have been appropriate to cite previous reports **97ptps1**, **01jpcb1** about a scan at 323 K.
- The SPAN data at 293 K are new, though it would have been appropriate to cite earlier work **04pb1** reporting SPAN data at 275, 283, 320, 354 K.
- TOSCA at 27 K. **Covert parallel submission** with **05jps2** and at least in part **covert duplicate** of **04jms1**: Fig 8 is Fig 1 of **05jps2** and Fig 1 of **04jms1**; Fig 2 is Fig 4 of **05jps2**.

05fncn (#158) **N**
Small-Angle Neutron Scattering and Photon Correlation Spectroscopy Investigation on Buckminsterfullerene Solutions
V Magazù, F Migliardo, M Vadala
Fullerenes, Nanotubes, and Carbon Nonstructures 13 (3), 203-214 (2005)

05jcp (#159, submitted 9dec04) **D**
Tetrahedral order in homologous disaccharide-water mixtures
C Branca, S Maccarrone, S Magazù, G Maisano, SM Bennington, J Taylor
Journal of chemical physics 122 (17), 174513 (2005)

This is a **covert reanalysis** of INS (MARI) measurements on water and (S,T):12H at 253, 278, 313, 353 K, previously reported in the brief paper **04pb3**. Figs 2,4c,5c are is Figs 1,2b,2a there.

05jms (#160, submitted 13jan05) **U**
Fragility characterization by neutron scattering for pure homologous disaccharides
C Branca, S Magazù*, G Maisano, MTF Telling
Journal of molecular structure 748 (1), 5-8 (2005)

Pure T,S by QENS (OSIRIS).

05jpcb (#161, submitted 15jul04) **U**
How homogeneous are the trehalose, maltose, and sucrose water solutions? An insight from molecular dynamics simulations
A Lerbret*, P Bordat, F Affouard, M Descamps, F Migliardo
The Journal of Physical Chemistry B 109 (21), 11046-11057

Simulations only.

05jps1 (#162, submitted 10dec04) **U**
Inelastic neutron scattering study on EG and PEGs as a function of the degree of polymerization
S Magazù, G Maisano, F Migliardo
Journal of Physical Studies 9 (1), 45-51 (2005)

INS (TOSCA) on E,P(200,400,600) at 17 K. Duplicated in **13jms**.

05jps2 (#163, submitted 27jun04) **P**
Neutron scattering investigation on trehalose, maltose and sucrose/H_2O mixtures
S Magazù, G Maisano, F Migliardo
Journal of Physical Studies 9 (2), 124-129 (2005)

T:2H, (M,S,T):19D at 27 K by TOSCA. Rich set of self-citations [13-23] for other spectroscopic techniques, including **02apa2**, but not **02apa3**, nor the

other TOSCA papers **04jms1**, **04jml3**. Hence an artful **covert duplication**, even if some data may be new (**02apa3** reports on measurements at 20 K). **Covert parallel submission** with **05cp** and **05jrsi**. Fig 1 is Fig 1 of **04jms1**, Fig 8 of **05cp**, Fig 2 of **05jrsi**. Fig 3 is Fig 1 of **04jml3**. Fig 4 is Fig 9 of **05cp** and Fig 4 of **05jrsi**, but it is surprisingly different from Fig 2 of **04jms1**.

05jrsi (#164, submitted 30nov04) **P**
Inelastic neutron scattering study on bioprotectant systems
S Magazù*, F Migliardo, AJ Ramirez-Cuesta
Journal of the Royal Society Interface 2 (5), 527-532 (2005)

Covert parallel submission with **05cp** and **05jps2**. Duplicated figures listed under **05jps2**.

05ps (#165, submitted 27jun04) **D**
Inspection of the glassy mixtures elastic intensity by IN13
S Magazù*, F Migliardo, C Mondelli, G Romeo
Physica Scripta 71 (4), 409 (2005)

Covert duplicate of **03cp1**, since the same experiment on (S,T):19D by ENS (IN13) is described, with no cross-reference in the experimental section, though **03cp1** is cited once in the text (p 411, [18]).

05physio (#166, submitted 20jul04) **U**
Role of polyols in thermal inactivation of shark ornithine transcarbamoylase
E Bellocco*, G Laganà, D Barreca, S Ficarra, E Tellone, S Magazù, C Branca, A Kotyk, A Galtieri, U Leuzzi
Physiological research 54 (4), 395 (2005)

Kinetics from concentration measurements.

2006 papers

06cp (#167, submitted 19jan06) **P**
Transport and diffusion processes in trehalose–water solutions: Theory and experiments
S Magazù*, G Maisano, F Migliardo, NP Malomuzh, EV Orlov
Chemical physics 330 (1), 90-100 (2006)

No experimental section. No mentioning of IRIS, except in the acknowledgement (dedicated runs by M Telling). The data analysis (I haven't read all the text) seems to partly duplicate **06jpcb1** (not cross-referenced), most likely in form of a **covert parallel submission**; in any case, Fig 6 is Fig 3 of **06cp**, Fig 7 is Fig 5a of **06cp**.

06ijps1 (#168, submission undated) **P**
INS Study on Physical Mechanisms of Bioprotection
S Magazù, F Migliardo*, AJ Ramirez-Cuesta
International Journal of Physical Sciences 1 (2), 075-080 (2006)

Covert parallel submission with **07jrsi**: (M,S,T):(7,10,14)H at 27K by TOSCA. Fig 3a-c is Fig 3b-d of **07jrsi**; Fig 4a-c is Fig 4b-d of **07jrsi**; Fig 5a-c is Fig 5b-d of **07jrsi**.

06ijps2 (#169, submission undated) **D**
Theoretical and experimental studies in hydrogen bonded glass forming systems
S Magazù, G Maisano, F Migliardo*, NP Malomuzh, IV Blazhnov
International Journal of Physical Sciences 1 (3), 126-139 (2006)

Micro- and macro-fragility of glycerol. Dedicated runs of IN13. The theory sections "fragility by viscosity measurements" and "fragility by elastic neutron scattering measurements" (pp 134–137) are a **covert duplicate** of **06pre**. The incorrect citation described there is also copied.

06japs (#170, submitted 21oct05) **U**
Synthesis of polyethylene oxide hydrogels by electron radiation
C Branca*, S Magazù, G Maisano, L Auditore, RC Barna, D De Pasquale, U Emanuaele, A Trifirò, M Trimarchi
Journal of applied polymer science 102 (1), 820-824 (2006)

Unrelated other publications.

06jbp (#171, submission undated) **D**
Landscape Excitation Profiles and Excess Thermodynamic Properties of Disaccharide Aqueous Solutions
S Magazù, C Mondelli, G Romeo
Journal of biological physics 32 (2), 145-151 (2006)

Covert duplicate of 03cp1, since the same experiment on (S,T):19D by ENS (IN13) is described. Curiously, the T range is given with 5-digits precision, 18.27–309.00 K.

06jpcb1 (#172, submitted 4jul05) **D**
α,α-trehalose-water solutions. VIII. Study of the diffusive dynamics of water by high-resolution quasi elastic neutron scattering
S Magazù*, F Migliardo, MTF Telling
Journal of Physical Chemistry B 110 (2), 1020-1025 (2006)

Covert duplicate of **05cp**, describing the same experiment on (M,S,T):19(D,H) at 283, 308, 320 K by IRIS. Additional temperature 295 K mentioned in text (p 1023). Fig 1 is Fig 2 of **05cp**. The data analysis (I haven't read all the text) might qualify as a **covert parallel submission** with **06cp**; in any case, Fig 3 is Fig 6 of **06cp**, Fig 5a is Fig 7 of **06cp**.

06jpcb2 (#173) **N**
Structural investigation of the confinement of finite

amounts of trehalose in water-containing sodium bis (2-ethylhexyl) sulfosuccinate reversed micelles
C Branca*, S Magazù, A Ruggirello, V Turco Liveri
Journal of Physical Chemistry B 110 (51), 25608-25611 (2006)

06pb (#174, submission undated) **D**
Fragility of complexity biophysical systems by neutron scattering
S Magazù*, F Migliardo, E Bellocco, G Laganà, C Mondelli
Physica B 385 [Proceedings of the Eighth International Conference on Neutron Scattering], 856-858 (2006)

Covert duplicate of **04bpj** / **04jpcb1**, since the same experiment on (M,S,T):(6,19)H by ENS (IN13) are described. **04bpj** is cited (p 858 [7]), but not for sugars. Additionally, there are new data on pure S and T. Fig 4 is Fig 5 of **04jpcb1** with two additional data points.

06pre (#175, submitted 26sep05) **U**
Macro-and microdefinitions of fragility of hydrogen-bonded glass-forming liquids
IV Blazhnov, S Magazù, G Maisano, NP Malomuzh, F Migliardo
Physical Review E 73 (3), 031201 (2006)

While there is no major fraud in this work, it should nevertheles be noted that it contains an incorrect citation. In **04bpj**, the harmonic approximation for the mean squared displacement,

$$\langle \Delta u^2(T) \rangle = \frac{h\langle \nu \rangle}{2K} \coth\left(\frac{h\langle \nu \rangle}{2k_B T} - 1\right) \qquad \text{(B3)}$$

is ascribed to Doster et al. (1989), Smith (1991), and Bicout & Zaccai (2001). In **04pccp** and **04pb4** the Smith reference has gone. In **04jcp** and **04jpcb1** only Zaccai (2000) and Bicout & Zaccai (2001) are cited in connection with the formula. Finally, in **06pre** the same formula (Eq) 26is introduced with the words "the mean square displacement behavior can be fitted within the framework of the harmonic approximation [11,12]", where [11,12] are self-citations of **04bpj** and **04jcp**. There are no more citations of Doster, Smith or Zaccai in the entire paper.

In the same section (p 4), there is a misleading reference to "works on selenium by Migliardo *et al.* [28] and Magazù *et al.* [29]." The author lists of the cited works are actually: [28] G Galli, P Migliardo, R Bellissent, and W Reichardt; [29] E Burattini, M Federico, G Galli, S Magazù, and D Majolino. Differently from what the text, coauthored by Federica Migliardo, seems to suggest, ref [28] was not written by her but coauthored by her father Placido.

2007 papers

07aipcs (#176) **N**
Elastic and quasi-elastic incoherent neutron scattering: an integrated experimental, theoretical and simulative approach on systems of biophysical interest of increasing complexity
A Benedetto, S Magazù, G Maisano, F Migliardo
AIP Conf. Proc. 965 [workshop "Complexity, Metastability, and Nonextensivity"], 245 (2007)

07bpc (#177, submitted 25may06) **D**
Changes in vibrational modes of water and bioprotectants in solution
S Magazù*, F Migliardo, AJ Ramirez-Cuesta
Biophysical chemistry 125 (1), 138-142 (2007)

Reports on INS (TOSCA) experiments on (S,T):(2,7,10,14)H at 27 K. by TOSCA ⇒ Partial **covert duplicate** of **07jrsi**. Earlier TOSCA reports ([9]=**05jrsi**) are only cursorily cited ("previous neutron scattering results [5-10]"). The water ice and T:2H data are a **covert duplicate** of **05jrsi**: Fig 1 is Fig 1a of **05jrsi**; Fig 2a is part of Fig 1b of **05jrsi**. The (S,T):(7,10,14)H data are most probably a **covert parallel submission** with **07jrsi** where the same spectra are shown.

07ebpj1 (#178, submitted 21jun06) **D**
Study of the dynamical properties of water in disaccharide solutions
S Magazù*, F Migliardo, MTF Telling
European Biophysics Journal 36 (2), 163-171 (2007)

Covert compilation of two experiments on (M,S,T):19(D,H) over 273-353K:

- The IRIS experiment description are a **covert duplicate** of **06cp**, **06jpcb1**, and earlier work (none of them cited); Fig 2 is a remix of Figs 1,2 of **06jpcb1** Fig 3 is Fig 4b of **06jpcb1**, Fig 4a is a badly scaled variant of Fig 4a of **06jpcb1**, Fig 4b is Fig 4c of **06jpcb1**.
- SPAN data play a minor role. I haven't investigated the relation to **04pb1** and **05cp**.

07ebpj2 (#179, submitted 5feb07) **U**
Temperature dependence of protein dynamics as affected by sugars: a neutron scattering study
S Magazù, G Romeo*, MTF Telling
European Biophysics Journal 36 (7) [Proc of XVIII Congress of the Italian Society of Pure and Applied Biophysics], 685-691 (2007)

For once, IN13 data are cited correctly (p 690, text and caption of Fig 8). New data on L:(S,T):H by OSIRIS.

07jpcb (#180, submitted 10mar07) **D**
Theoretical and experimental models on viscosity: I. Glycerol
S Magazù*, F Migliardo, NP Malomuzh, IV Blazhnov
Journal of Physical Chemistry B 111 (32), 9563-9570 (2007)

This is to some extent a **covert duplicate** of **06ijps2**: Figs 1,7 here are Figs 3,5 there. Fig 10 is a **covert duplicate** of Fig 4 in **06pre**.

07jms1 (#181, submitted 23may06) **P**
Kosmotrope character of maltose in water mixtures
S Magazù*, F Migliardo, AJ Ramirez-Cuesta
Journal of molecular structure 830 (1), 167-170 (2007)

This work complements **07bpc** by adding M:(2,7,10,14)H to the collection of INS (TOSCA) data, measured at 27 K. The data (M,S,T):(7,10,14)H data set appears six weeks later in **07jrsi**; hence it is most likely a **covert parallel submission**.

07jms2 (#182, submitted 24sep06) **U**
Aggregation processes of biomolecules in presence of trehalose
S Magazù*, F Migliardo, D Barreca, E Bellocco, G Laganà
Journal of Molecular Structure 840 (1), 114-118 (2007)

SANS (LOQ) measurement of L:(H/(.2,.8,1.)D)[:T] at 310, 333 K. Later duplicated in **08pb**.

07jrsi (#183, submitted 21jul06) **P**
Concentration dependence of vibrational properties of bioprotectant/water mixtures by inelastic neutron scattering
S Magazù*, F Migliardo, AJ Ramirez-Cuesta
Journal of The Royal Society Interface 4 (12), 167-173 (2007)

Extends previous INS work on (M,S,T):*H by adding new concentrations *:(7,10,14)H. Experimental section: (M,S,T):(7,10,14)H at 27 K by TOSCA. This is a **covert parallel submission** with 06ijps1 (for details see there). It is also a **covert duplicate**, most likely submitted in **parallel**, of **07jms1** (for M) and **07bpc** (for S,T) (for details see there).

07pre (#184, submitted 7feb07) **U**
Role of orientation disorder in the formation of fragility of glassy water and glycerol-like liquids
SV Lishchuk, TV Lokotosh, S Magazù, NP Malomuzh, F Migliardo
Physical Review E 76 (6), 061504 (2007)

07shock (#185) **N**
The disaccharide trehalose inhibits proinflammatory phenotype activation in macrophages and prevents mortality in experimental septic shock
L Minutoli, D Altavilla, A Bitto, F Polito, E Bellocco, G Lagana, D Giuliani, T Fiumara, S Magazù, P Ruggeri, S Guarini, F Squadrito*
Shock 27 (1), 91-96 (2007)

2008 papers

08cp1 (#186, submitted Special) **G**
issue — Neutrons in biology — Guest editors' introduction
S Magazù, G Zaccai
Chemical Physics 345 (2-3), 131-132 (2008)

Workshop "Neutron Scattering Highlights on Biological Systems", Taormina 7-10oct2006.

08cp2 (#187, submitted 1feb07) **B**
Water structure around trehalose
SE Pagnotta*, MA Ricci, F Bruni, S McLain, S Magazù
Chemical Physics 345 (2) [Special issue as per **08cp1**], 159-163 (2008)

Neutron Diffraction (SANDALS) on T:100(H,H/D,D) at 298K. New data. Older work on 1:20 and 1:40 solutions is cited, but without revealing that the same instrument has been used. Only a very shallow, preliminary report **02pa2** on the old work is cited, and not the final paper **04pb2**.

08cp3 (#188, submitted 28mar07) **D**
Neutron scattering and HPLC study on L-ascorbic acid and its degradation
E Bellocco*, D Barreca, G Laganà, U Leuzzi, F Migliardo, RL Torre, G Galli, A Galtieri, L Minutoli, F Squadrito
Chemical Physics 345 (2) [see above], 191-195 (2008)

Vitamin C investigated by different techniques. The QENS experiment (IRIS, 306 K) is a **covert duplicate** of **01jpcb2**.

08cp4 (#189, submitted 29mar07) **D**
Neutron scattering studies on dUTPase complex in the presence of bioprotectant systems
B Varga, F Migliardo, E Takacs, B Vertessy, S Magazù*, C Mondelli
Chemical Physics 345 (2) [see above], 250-258 (2008)

Covert compilation with some fresh data.

- Data on dUTPase-inhibitor-candidate[:ligand]:T:H by IN13 are possibly original.
- (M,S,T):*H by IN13 is one more **covert duplicate** of IN13/sugar papers; Fig 2 shows elastic scans for the usual seven samples.
- The IRIS part is a **covert duplicate** of several earlier papers, especially of the latest compilation **07ebpj1**. Fig 3 is Fig 2 of **07ebpj1**. Fig 4 is a badly scaled version of Fig 4a of **06jpcb1**, with inset from part c of the same fig.

08ejphar (#190, submitted 11jul07) **D**
Trehalose: a biophysics approach to modulate the inflammatory response during endotoxic shock
L Minutoli, D Altavilla, A Bitto, F Polito, E Bellocco, G Laganà, T Fiumara, S Magazù, F Migliardo, F Saverio Venuti, F Squadrito*
European journal of pharmacology 589 (1), 272-280 (2008)

This is an interdisciplary work, with a corresponding author (Squadrito) from the Department of Clinical and

Experimental Medicine and Pharmacology, hence a complete outsider to neutron scattering. The "Materials and Methods" section has 16 subsections. Only one of them is concerned with neutron scattering, and only this one is investigated here. It reports an NSE (IRIS) experiment on (M,S,T):19(D,H) at 273–353 K. However, in the data analysis (Sect 3.2.1), only results for 283, 295, 308, and 320 K are given. Possibly, the upper temperature is just a typo; **10jbp** has 273–323 K. In any case, the experiment description is at least in part a **covert duplicate** of **06jpcb1** and othe papers. Numerical results (p 278) are those of **06cp** (p 96) and **06jpcb1** (p 1023).

08fc1 (#191) **N**
Spectroscopic investigation of structure-breakers and structure-makers on ornithine carbamoyltransferase
D Barreca, E Bellocco, G Laganà, U Leuzzi, S Magazù, F Migliardo*, A Galtieri
Food chemistry 106 (4), 1438-1442 (2008)

08fc2 (#192, submitted 30jun06) **D**
Structural and dynamical properties of water in sugar mixtures
S Magazù, F Migliardo*, MTF Telling
Food chemistry 106 (4), 1460-1466 (2008)

Covert compilation of experiments on (M,S,T):19(D,H):

- The IRIS part is a **covert duplicate** of **06jpcb1** and other papers, none of them cited. No figure is shown. The numeric values of diffusion coefficients (p 1461) are those of **06jpcb1** (p 1023).
- The IN13 part is a **covert duplicate** of **03jcp** / **04bpj** / **04jpcb1** / **06pb**. Fig 2 is Fig 1 of **04bpj** with Fig 2 of **06pb** as new inset.
- The SPAN part (Fig 2) is most likely a duplicate of **04pb1** and **05cp**, but I haven't looked up.

08ijbmm (#193) **N**
Influences of temperature and threshold effect of NaCl concentration on Alpias vulpinus OCT
E Bellocco*, D Barreca, G Laganà, E Tellone, S Ficarra, F Migliardo, U Leuzzi, S Magazù, A Galtieri
International journal of biological macromolecules 43 (5), 474-480 (2008)

08jcp (#194, submitted 23jun08) **P**
Characterization of molecular motions in biomolecular systems by elastic incoherent neutron scattering
S Magazù*, G Maisano, F Migliardo, G Galli, A Benedetto, D Morineau, F Affouard, M Descamps
Journal of chemical physics 129 (15), 155103 (2008)

This is a **covert parallel submission** with **09pre**, and a **covert reanalyis** of IN13 data on (S,T):19H from **03jcp**, **04bpj**, **04jpcb1**.

08jcp and **09pre** claim to present a novel way of analysing elastic neutron scattering scans. Eq 1, identical in both papers, defines the Fourier transform between incoherent scattering law $S(q,\omega)$ and the self-correlation function $I(q,t)$ with an unusual factor of $\sqrt{2\pi}$ that breaks either the usual definition of S or the initial value $I(0) = 1$ (this mathematical blunder later reappears in Eq 1 of **10jpcb1**, **11jncs1**, **11jpcb2**, **11rsi**, Eq 4 of **13fbp**, and Eq 10 of **10bba**). As for the overlap of **08jcp** and **09pre**, here a selection:

08jcp	**09pre**
Eqs 12,17,21,24,31	Eqs 8,10,12,15,24
Fig 2a-d	Fig 1d-a
Fig 7	Fig 2
Fig 10	Fig 5

08jms1 (#195, submitted 12jul07) **D**
Mean square displacement from self-distribution function evaluation by elastic incoherent neutron scattering
S Magazù*, G Maisano, F Migliardo, A Benedetto
Journal of Molecular Structure 882 (1), 140-145 (2008)

Experimental: P400 by IN13, 20–310 K ⇒ duplicated by **08pre**, **08jpcb**.

08jms2 (#196, submitted 4oct07) **D**
Experimental study on dUTPase-inhibitor candidate and dUTPase/disaccharide mixtures by PCS and ENS
B Varga, F Migliardo, E Takacs, B Vertessy, S Magazù*
Journal of Molecular Structure 886 (1), 128-135 (2008)

While the title says clearly that this is a PCS and ENS study of proteins, the experimental section also describes IN13 scans on binary mixtures (M,S,T):H. Therefore, this is one of the many **covert duplicates** of **03jcp**. Fig 8 is a light version of Fig 2 of **03jcp**.

08jpcb (#197, submitted 20dec07) **P**
Elastic incoherent neutron scattering on systems of biophysical interest: mean square displacement evaluation from self-distribution function
S Magazù*, G Maisano, F Migliardo, A Benedetto
Journal of Physical Chemistry B 112 (30), 8936-8942 (2008)

P400 by IN13, 20-310 ⇒ **covert duplicate** of **08jms1**; **covert parallel submission** with **08pre** (see there).

08jpcm (#198, submitted 29jun07) **D**
Study of the correlation between the temperature dependence of viscosity and excess quantities in glycerol
S Magazù, F Migliardo*
Journal of Physics: Condensed Matter 20 (10), 104202 (2008)

This is a **covert compilation** of several precedent papers. Eqs 2,3,4 have appeared many times before (e. g. Eqs. 4,5,6 of **04jcp**). Eq 16 is incorrectly attributed to Magazù *et al*, just as described under **06pre**. Fig 1 is Fig 3 of **06ijps2**. Fig 2 is Fig 3 of **07jpcb**. Fig 4 shows $\log \eta$ vs $\langle u^2 \rangle^{-1}$ as does Fig 6 of **06ijps2**, but the data don't agree.

Note also an incorrect citation: **03jcp** (Eq 9) and **04jcp** (Eq 7) correctly attribute an approximation for the viscosity

$$\eta = \eta_0 \exp[u_0^2/\langle u^2\rangle_{\rm loc}] \qquad \text{(B4)}$$

to Buchenau & Zorn (1992). In **04bpj**, the citation is less clear, and in **04jpcb1**, it is attached to a data set, and no longer to the formula. Finally, in **08jpcm** Buchenau & Zorn (1992) are no longer cited at all. Instead, the formula is ascribed to "Magazù *et al* 2004" (**04bpj**).

08pb (#199, submitted 3jul07) **D**
Neutron scattering study on the interaction between polyethylene glycol and lysozyme
S Magazù*, F Migliardo, D Barreca, E Bellocco, G Laganà
Physica B 403 (13), 2408-2412 (2008)

SANS (LOQ) experiment on L:D[:P400]. The L:D part is a **covert duplicate** of **07jms2**. Figs 1,2,3, here are Figs 1,2a,2b there.

08pre (#200, submitted 7feb08) **P**
Mean square displacement evaluation by elastic neutron scattering self-distribution function
S Magazù*, G Maisano, F Migliardo, A Benedetto
Physical Review E 77 (6), 061802 (2008)

P400 by IN13, 20-310 K ⇒ **covert duplicate** of **08jms1** and **covert parallel submission** with **08jpcb**.

08jms1	**08jpcb**	**08pre**
Fig 1	Fig 1	Fig 1
Fig 2	Fig 2	Fig 2
Fig 3	Fig 5	Fig 4
Fig 4b	Fig 6	—
—	Fig 7	Fig 5

2009 papers

09ijbmm (#201, submitted 8apr09) **D**
Stabilization effects of kosmotrope systems on ornithine carbamoyltransferase
D Barreca, E Bellocco, G Galli, G Laganà, U Leuzzi, S Magazù*, F Migliardo, A Galtieri, MTF Telling
International journal of biological macromolecules 45 (2), 120-128 (2009)

This article promises to report on "the synergic use of different techniques" to study "the influence of salts and additives" on an enzyme. However, the neutron scattering part deals only with the usual sugar solutions.

- NSE (SPAN) on T:19H. **Covert duplicate** of **07ebpj1** and earlier work duplicated there. Fig 3 here is composed of Figs 5a,6 there.
- QENS (IRIS) on (M,S,T):*H. **Covert duplicate** of **06jpcb1**. Fig 4a,b here is Fig 4b,a there.

09jamop (#202, submitted 25jan09) **D**
Fragility of bioprotectant glass-forming systems in extremophiles
S Magazù, F Migliardo*
Journal of Atomic, Molecular, and Optical Physics 2009 (2009)

Labelled "Review Article". Contains nevertheless an Experimental section that reads like an original report, with no references to earlier publications. Therefore a **covert duplicate** of the original experiments on (M,S,T):*(D,H) by ENS (IN13) **03cp1** and **03jcp**. All figures are covert duplicates.

09jncs (#203, submitted 4apr09) **D**
Theoretical and experimental study of excess quantities in glass-forming systems
S Magazù*, F Migliardo
Journal of Non-Crystalline Solids 355 (52), 2634-2639 (2009)

Reanalysis of ENS, viscosity, and free-volume data of glycerol, polybuthadiene, and orthoterphenyl. The glycerol part is a **covert duplicate** of **08jpcm**: Figs 1,3a,4a,5a,6a here are Figs 1,3,4,5,6 there. Most formulae have been published several times before (e .g. in **06pre**, **08jpcm**).

09pre (#204, submitted 13jul08) **P**
Biomolecular motion characterization by a self-distribution-function procedure in elastic incoherent neutron scattering
S Magazù*, G Maisano, F Migliardo, A Benedetto
Physical Review E 79 (4), 041915 (2009)

This is a **covert parallel submission** with **09pre**, as described there. It is also a **covert reanalyis** of IN13 data on (S,T):19H from **03jcp**, **04bpj**, **04jpcb1**.

2010 papers

10bba (#205, submitted 1may09) **D**
Motion characterization by self-distribution–function procedure
S Magazù*, G Maisano, F Migliardo, A Benedetto
Biochimica et Biophysica Acta (BBA) - Proteins and Proteomics 1804 (1), 49-55 (2010)

Accoring to the introduction, this work aims at clarifying various aspects of previous work on the self-distribution formalism; in this context, **08jcp** is cited, but not **09pre**. The experimental section, however, describes IN13 scans on (S,T):19H as if freshly performed. Therefore this is yet another ⇒ **covert duplicate** of the IN13 sugar papers. The formalism, in spite of the promising announcement in the introduction, is mostly a dull repetition of previous work; Eq 31, almost the final result, is Eq 35 of **09pre**. Fig 1 has appeared in **08jc** and **09pre**; Fig 2 is Fig 3 of **09pre**.

10bpc (#206) **N**
Anti-aggregation properties of trehalose on heat-induced secondary structure and conformation changes of bovine serum albumin
D Barreca, G Laganà, S Ficarra, E Tellone, U Leuzzi, S Magazù, A Galtieri, E Bellocco*
Biophysical chemistry 147 (3), 146-152 (2010)

10cnfs (#207, submitted Molecular) **G**
Mechanisms of Bioprotection Process by Trehalose
S Magazù, F Migliardo
Current Nutrition & Food Science 6 (3), 157-160 (2010)

Extended version published as **12cnfs**.

10jbp (#208, submitted 9apr09) **D**
Study of solvent–protein coupling effects by neutron scattering
B Varga, F Migliardo, E Takacs, B Vertessy, S Magazù*, MTF Telling
Journal of biological physics 36 (2), 207-220 (2010)

This work promises results on protein U, but most figures are concerned with sugar solutions. Besides potentially new material, this is a **covert compilation** of:

- IRIS: The experimental section does not say which materials were investigated. Fig 1 is a **covert duplicate** of Fig 1 in **08fc2**, with data points going back to earlier work.
- IN13: (M,S,T)[:H], hence one more **covert duplicate** of **03jcp**. Fig 5 is mostly a remix of Fig 2 of **06pb**.

10jcp (#209, submitted 5oct09) **Q**
Study of the relaxational and vibrational dynamics of bioprotectant glass-forming mixtures by neutron scattering and molecular dynamics simulation
S Magazù*, F Migliardo, F Affouard, M Descamps, MTF Telling
Journal of Chemical Physics 132 (18), 184512 (2010)

QENS on T:(0,1.25,2.5,5,7.5,10)G by IRIS at 290, 310, 330, 350, 370, 390 K and OSIRIS at 100, 290 K. Later duplicated in **11jncs2** (possibly in form of a **covert parallel submission**), **13amse2**, **13cp6**.

10jemaa1 (#210) **N**
Monitoring Electromagnetic Field Emitted by High Frequencies Home Utilities.
E Calabrò, S Magazù
Journal of Electromagnetic Analysis & Applications 2 (9) (2010)

10jemaa2 (#211) **N**
Inspections of Mobile Phone Microwaves Effects on Proteins Secondary Structure by Means of Fourier Transform Infrared Spectroscopy.
E Calabrò, S Magazù
Journal of Electromagnetic Analysis & Applications 2 (11) (2010)

10jpcb1 (#212, submitted 17mar10) **U**
Mean square displacements from elastic incoherent neutron scattering evaluated by spectrometers working with different energy resolution on dry and hydrated (H_2O and D_2O) lysozyme
S Magazù*, F Migliardo, A Benedetto
Journal of Physical Chemistry B 114 (28), 9268-9274 (2010)

ENS scans on lysozyme L and solutions L:(H,D) at h=0.4 by IN13 (20-310K) and IN10 (20-320K). This seems to be an original experimental report. Instrument scientists are absent from the author list, but named in the acknowledgment. The "Theoretical Approach" starts with a wrong factor $\sqrt{2\pi}$ in Eqs 1,2. Section IV is a tedious duplication of previous work, but at least it is an overt one, with ample references [4-9] provided. The experimental section is duplicated later in **11jpcb2**, **11rsi**, **13cp3**.

10jpcb2 (#213) **N**
FTIR spectroscopy studies on the bioprotective effectiveness of trehalose on human hemoglobin aqueous solutions under 50 Hz electromagnetic field exposure
S Magazù*, E Calabro, S Campo
The Journal of Physical Chemistry B 114 (37), 12144-12149 (2010)

10js (#214, submission undated) **D**
Self-distribution-function procedure in elastic incoherent neutron scattering for biosystems molecular motion characterization
S Magazù*, F Migliardo, A Benedetto, M Gonzalez, C Mondelli
Journal of Spectroscopy 24 (3-4), 387-391 (2010)

This is a rather obscure journal, recently taken over by Hindawi. It is not even clear whether the name of the journal is "Journal of Spectroscopy" (as on the web site) or "Spectroscopy" (as on the paper).

Covert duplicate of **03jcp**, since the very short Experimental section describes (S,T):19H investigated by IN13. Fig 1 is Fig 7 of **09pre**; Fig 2 is Fig 5 of **10bba**.

10obmj (#215, submitted 9sep08) **D**
Spectroscopic Study of the Effects of Bioprotectant Systems on the Protein Stability
S Magazù*, F Migliardo, AJ Ramirez-Cuesta, MTF Telling
Open Biomater J 1, 34-41 (2009)

Covert compilation of three unrelated experiments:

- INS (TOSCA) on (M,S,T):(2,7,10,14)H at 27 K ⇒ **covert duplication** of **07jrsi** (Figs 1–3 here are Figs 3–5 there).
- QENS (IRIS) on (M,S,T):19(D,H) at 283–320 K ⇒ **covert duplication** of **06jpcb1** (Fig 4 here is Fig 4 there).
- SANS (LOQ) on L:D[:T] at 310, 333 K ⇒ sources not yet looked up.

10qascf (#216, submitted 22oct09) **D**
Spectroscopic study of the physical properties making trehalose a stabilizing and shelf life extending compound in food industry
S Magazù*, F Migliardo
Quality Assurance and Safety of Crops & Foods 2 (2), 56-65 (2010)

This paper is explicitly designated as a "Review". It contains nevertheless an Experimental section that reads like an original report, with no references to earlier publications. It is therefore a **covert compilation** of various experiments on (M,S,T):*H.

- The ENS part is a **covert duplicate** of previous reports on IN13/sugar. Fig 9 shows a subset of the data points from Fig 4 of **06pb**.
- IRIS: The experiment has been described many times before. Fig 6 is a **covert duplicates** of Fig 4b in **06jpcb1**, with M omitted. Fig 5 is a not so covert duplicate: The figure caption does indicate a source, but the text says "Figure 5 (Magazù *et al.*, 2006, 2008b; Magazù & Migliardo, 2007)". This is an almost overt confession of the verbatim reuse of figures.
- Raman: not investigated.
- SANDALS: T:(20,4)(D,D/H,H): Fig 3 is a **covert duplicate** of Fig 2 of **04pb2**.
- LOQ, not investigated.

2011 papers

11ebpjbpl (#217, submission undated) **G**
Protein Dynamical Transition and Resolution Effects on Mean Square Displacement in Lysozyme Systems
A Benedetto, S Magazù, F Migliardo
European Biophysics Journal with Biophysics Letters 40, 190-190 (2011)

Just an abstract ⇒ **ignorable**.

11epjst (#218, submitted Aerodynamic) **U**
levitation and laser heating
L Hennet, V Cristiglio, J Kozaily, I Pozdnyakova, HE Fischer, A Bytchkov, ...
The European Physical Journal Special Topics 196 (1), 151-165 (2011)

11jemaa (#219) **N**
Static and 50 Hz Electromagnetic Fields Effects on Human Neuronal-Like Cells Vibration Bands in the Mid-Infrared Region
E Calabrò*, S Condello, S Magazù, R Ientile
Journal of Electromagnetic Analysis & Applications 3 (2) (2011)

11jncs1 (#220, submission undated) **D**
Thermal behaviour of hydrated lysozyme in the presence of sucrose and trehalose by EINS
S Magazù*, F Migliardo, A Benedetto, C Mondelli, MA Gonzalez
Journal of Non-Crystalline Solids 357 (2), 664-670 (2011)

While the title announces a report on lysozyme, the majority of figures is on sugar solutions. The Experimental section describes IN13 scans on (S,T):19H, and IN10 scans on pd-L[:H[:(S,T)]]. The IN13 part is a **covert duplication** of many earlier papers. The formalism has much overlap with **08jcp**, **09pre**, **10bba**. Fig 1a,b is Fig 9 of **08jcp**; Fig 1c,d is Fig 3 of **09pre**; Fig 2c,d is Fig 3 of **10bba**; Fig 3 is Fig 9 of **09pre**.

11jncs2 (#221, submission undated) **Q**
Dynamics of glass-forming bioprotectant systems
S Magazù, F Migliardo*, MTF Telling
Journal of Non-Crystalline Solids 357 (2), 691-694 (2011)

Covert duplicate (possibly in form of a **covert parallel submission**) of **10jcp**. Same QENS experiments on T:(0,1.25,2.5,5,7.5,10%)G by IRIS and OSIRIS. Figs 1,2 here are Figs 1,5 there; Fig 4 reappears embellished in Figs 6,8,9,11 there. Caption of Fig 3 contradicts text in figure.

11jpcb1 (#222) **N**
Studying the Electromagnetic-Induced Changes of the Secondary Structure of Bovine Serum Albumin and the Bioprotective Effectiveness of Trehalose by Fourier Transform Infrared Spectroscopy
S Magazù*, E Calabro
The Journal of Physical Chemistry B 115 (21), 6818-6826 (2011)

11jpcb2 (#223, submitted 1dec10) **P**
Puzzle of protein dynamical transition
S Magazù*, F Migliardo, A Benedetto
Journal of Physical Chemistry B 115 (24), 7736-7743 (2011)

Describes ENS experiments on L and L:D by IN4, IN13, IN10, and on L:S:H by IN10. It is in part a **covert duplicate** of **10jpcb** where the same IN13 and IN10 measurements on L and L:D have been described, and it is a **covert parallel submission** with **11rsi**. Figs 2,3,4 are Figs 1,2,4 of **11rsi**.

11jpcb3 (#224, submitted 15jun11) **U**
Vibrational properties of bioprotectant mixtures of trehalose and glycerol
S Magazù*, F Migliardo, SF Parker
Journal of Physical Chemistry B 115 (37), 11004-11009 (2011)

T:(0,2.5,25%)G at 30K by INS (TOSCA).

11pss (#225) **N**
Time-of-flight neutron spectroscopy: a new application of aerodynamic sample levitation
J Kozaily, L Hennet, HE Fischer, M Koza, S Brassamin,

S Magazù, F Kargl
physica status solidi (c) 8 (11-12), 3155-3158 (2011)

11rsi (#226, submitted 13may11) **P**
Elastic incoherent neutron scattering operating by varying instrumental energy resolution: Principle, simulations, and experiments of the resolution elastic neutron scattering (RENS)
S Magazù*, F Migliardo, A Benedetto
Review of Scientific Instruments 82 (10), 105115 (2011)

The experimental validity test presents measurements on L[:(H,D)] by IN4, IN13, IN10, HFBS. As for IN13, IN10, this is a **covert duplicate** of **10jpcb1**. As for IN4, IN13, IN10, it is a **covert parallel submission** with **11jpcb2** (see there).

2012 papers

12aa (#227) **N**
Protective effects of agmatine in rotenone-induced damage of human SH-SY5Y neuroblastoma cells: Fourier transform infrared spectroscopy analysis in a model of Parkinson's disease
S Condello, E Calabrò, D Caccamo, M Currò, N Ferlazzo, J Satriano, S Magazù, R Ientiele*
Amino acids 42 (2-3), 775-781 (2012)

12apc (#228) **N**
Electromagnetic Fields Effects on the Secondary Structure of Lysozyme and Bioprotective Effectiveness of Trehalose
E Calabrò, S Magazù
Advances in Physical Chemistry 2012 (2012)

12bpj (#229, submission undated) **G**
Protein Dynamics by Neutron Scattering: The Protein Dynamical Transition
A Benedetto, F Migliardo, S Magazù
Biophysical Journal 102 (3), 51a (2012)

Just an abstract (only one paragraph) ⇒ **ignorable**.

12cnfs (#230, submitted Bioprotectant) **B**
Solutions and Food Applications
S Magazù, F Migliardo*
Current Nutrition & Food Science 8 (1), 49-54 (2012)

Contains a "disclosure": "The authors declare that this manuscript is an extended/updated version of" **10cnfs**. Designated as a "review" in the abstract. Figs 1a,b duplicate IN13 and TOSCA results on (M,T,S):*H. No sources given in the figure caption. Possibly a violation of copyright.

12ebpj1 (#231, submission undated) **G**
Cosmetics and pharmaceutics: new trends in biophysical approaches
S Magazù
European Biophysics Journal 41 (4), 359-360 (2012)

Editorial: Conference Orléans 14-15feb11.

12ebpj2 (#232, submitted 1jul11) **D**
Bio-protective effects of homologous disaccharides on biological macromolecules
S Magazù*, F Migliardo, A Benedetto, R La Torre, L Hennet
European Biophysics Journal 41 (4) [Special issue as per **12ebpj1**], 361-367 (2012)

While the title announces a report on lysozyme, the majority of figures is on sugar solutions. The Experimental section describes IN13 scans on (S,T):19H, and IN10 scans on pd-L[:H[:(S,T)]], just as in **11jncs1**. Fig 2 is Fig 2 of **11jncs1**, with other colors.

12jbp (#233) **N**
New insights into bioprotective effectiveness of disaccharides: an FTIR study of human haemoglobin aqueous solutions exposed to static magnetic fields
S Magazù*, E Calabrò, S Campo, S Interdonato
Journal of biological physics 38 (1), 61-74 (2012)

12jemaa (#234, submitted 12sep12) **U**
Comparison between Conventional Convective Heating and Microwave Heating: An FTIR Spectroscopy Study of the Effects of Microwave Oven Cooking of Bovine Breast Meat.
E Calabrò*, S Magazù
Journal of Electromagnetic Analysis & Applications 4 (11) (2012)

Research idea duplicated in **14sl**.

12jncs (#235, submitted 10feb12) **U**
Inelastic neutron scattering study of dynamical properties of bioprotectant solutions against temperature
S Magazù*, F Migliardo, MA Gonzalez, C Mondelli
Journal of Non-Crystalline Solids 358 (18), 2635-2640 (2012)

Experimental section: T/G (0,2.5,5% G) by IN4 (2.96A, 2-100K) and IN6 (5.12A, 300-373K). Closes the gap between previous experiments on IRIS and OSIRIS **10jcp** and TOSCA **11jpcb3**, both cited. Later duplicated in **13amse2**.

12jpcb1 (#236) **G**
Reply to "Comment on 'Puzzle of the Protein Dynamical Transition' "
S Magazù, F Migliardo, A Benedetto
Journal of Physical Chemistry B 116 (20), 6068-6069 (2012)

12jpcb2 (#237, submitted 19jun12) **D**
Innovative wavelet protocols in analyzing elastic incoherent neutron scattering
S Magazù*, F Migliardo, MT Caccamo

Journal of Physical Chemistry B 116 (31), 9417-9423 (2012)

The Experimental Section reports on (M,S,T):19(D,H) by IN13, but no data for *D are shown. The *H experiment is a **covert duplicate** of **03jcp**. T-scans exploded into wavelet scalograms. This starts a new series of **covert reanalyses**, which then continues with the sixfold parallel submission of scalograms that explore the q dependence of the same data (**13amse1** and other papers indicated there).

12jpcs (#238, submission undated) **D**
Resolution Effects on the Mean Square Displacement as Obtained by the Self-Distribution-Function Procedure
A Benedetto, S Magazù*, F Migliardo, C Mondelli, MA Gonzalez
Journal of Physics: Conference Series 340 (1) [5th European Conference on Neutron Scattering], 012093 (2012)

The Experimental Section reports on (S,T):19H, pdL[:(D,H[:(S,T)])] by IN4, IN10, IN13. As for IN13, this is one more **covert duplicate** of **03jcp**. Fig 3 is Fig 2 of **jncs1**; Fig 4 is Fig 5 in **10bba**.

12life (#239, submitted 24oct12) **U**
Molecular Mechanisms of Survival Strategies in Extreme Conditions
S Magazù*, F Migliardo, MA Gonzalez, C Mondelli, SF Parker, BG Vertessy
Life 2 (4), 364-376 (2012)

Journal published by MDPI, since 2014 on the Beall blacklist. Labelled "Review". Figure captions have correct references.

12rsi (#240) **G**
Response to "Comment on 'Elastic incoherent neutron scattering operating by varying instrumental energy resolution: Principle, simulations, and experiments of the resolution elastic neutron scattering (RENS)'" [Rev. Sci. Instrum. 83, 107101 (2012)]
S Magazù, F Migliardo, A Benedetto
Review of Scientific Instruments 83 (10), 107102 (2012)

12wjbc (#241) **N**
Modulation of HSP response in SH-SY5Y cells following exposure to microwaves of a mobile phone
E Calabrò, S Condello, M Currò, N Ferlazzo, D Caccamo, S Magazù, ...
World Journal of Biological Chemistry 3 (2), 34-40 (2012)

2013 papers

13amse1 (#242, submitted 31may13) **P**
Upgrading of Resolution Elastic Neutron Scattering (RENS)
S Magazù*, F Migliardo, MT Caccamo
Advances in Materials Science and Engineering 2013, 128271 (2013)

This is a **covert reanalysis** of **03jcp**, **04bpj**, **04jpcb1**, and a **sixfold covert parallel submission** of the very same q wavelet analysis with **13cp4**, **13ecb**, **fbp**, **13jcpbp**, **13jncs**. The same three scalograms are shown in Fig 3a,b,c of **13amse1**, Fig 3 of **13cp4**, and Fig 1 of **13ecb**.

Note Eq 1, which breaks the Fourier backtransform. Is this a failed attempt to fix the wrong factor of $\sqrt{2\pi}$ that has been copied so many times since **08jcp**?

13amse2 (#243, submitted 31may13) **D**
Study of the Boson Peak and Fragility of Bioprotectant Glass-Forming Mixtures by Neutron Scattering
F Migliardo*, S Magazù, MA Gonzalez, C Mondelli
Advances in Materials Science and Engineering 2013, 128271 (2013)

Labelled "Research Article", whereas the abstract says "review article". "Materials and Methods" section as in an original report. T/G mixtures investigated by OSIRIS, IN4, IN6. The OSIRIS part is a **covert duplicate** of **10jcp** and **11jncs2**. Fig 1b is Fig 1 of **11jncs2**; Fig 3b is Fig 3 of **10jcp**. The IN4 and IN6 part is a **covert duplicate** of **12jncs**.

13apc (#244) **N**
Demicellization of Polyethylene Oxide in Water Solution under Static Magnetic Field Exposure Studied by FTIR Spectroscopy
E Calabrò, S Magazù
Advances in Physical Chemistry (2013)

13bc (#245) **N**
Diosmin binding to human serum albumin and its preventive action against degradation due to oxidative injuries
D Barreca*, G Laganà, G Bruno, S Magazù, E Bellocco
Biochimie 95 (11), 2042-2049 (2013)

13bem (#246) **N**
Effects of low intensity static magnetic field on FTIR spectra and ROS production in SH-SY5Y neuronal-like cells
E Calabrò, S Condello, M Currò, N Ferlazzo, D Caccamo, S Magazù, R Ientile
Bioelectromagnetics 34 (8), 618-629 (2013)

13cbcbp1 (#247, submission undated) **D**
Spectroscopic determination of lysozyme conformational changes in the presence of trehalose and guanidine
D Barreca*, G Laganà, S Ficarra, G Gattuso, S Magazù, R La Torre, E Tellone, E Bellocco
Cell biochemistry and biophysics 66 (2), 297-307 (2013)

Interdisciplinary collaboration with various experiments on different samples. Among them:

- PCS on T:*H at 313, 333, 353, 378 K and at different concentrations, to determine diffusions coefficients.
- Viscosity measurements on T:*H.

Both are **covert duplicates** of **98jcp** and **jpcb**. Fig 5 is Fig 2 in **98jcp** and Fig 1 in **jpcb**. The data in Tab 2 are those of Fig 2 in **98jcp** and Fig 2 in **jpcb**.

13cbcbp2 (#248) **N**
Is There a Sphingomyelin-Based Hydrogen Bond Barrier at the Mammalian Host–Schistosome Parasite Interface?
F Migliardo, H Tallima, R El Ridi
Cell biochemistry and biophysics, 68, 1-9 (2013)

13cp1 (#249, submitted Editorial) **G**
of Special Issue of Chemical Physics
S Magazù, H Frauenfelder
Chemical Physics 424, 1-1 (2013)

13cp2 (#250) **N**
Concepts and problems in protein dynamics
PW Fenimore*, H Frauenfelder, S Magazù, BH McMahon, F Mezei, ...
Chemical Physics 424 [Special issue as per **13cp1**], 2-6 (2013)

13cp3 (#251, submission undated) **D**
Protein dynamics by neutron scattering: The protein dynamical transition and the fragile-to-strong dynamical crossover in hydrated lysozyme
S Magazù, F Migliardo, A Benedetto*, B Vertessy
Chemical Physics 424 [see above], 26-31 (2013)

This is a **covert duplicate** of **10jpcb1** for the experiments (IN13 and IN10 on L[:D] and more), and of **11jpcb2** and **11rsi** for the data analysis:

11jpcb2	**11rsi**	**13cp3**
Fig 1	—	Fig 2*m*
Fig 2	Fig 1	Fig 1
Fig 3	Fig 2	—
Fig 4	Fig 4	Fig 1a*i*
Fig 5	—	Fig 4
—	Fig 5	Fig 3a

13cp4 (#252, submission undated) **P**
Investigations of homologous disaccharides by elastic incoherent neutron scattering and wavelet multiresolution analysis
S Magazù, F Migliardo, BG Vertessy, MT Caccamo*
Chemical Physics 424 [see above], 56-61 (2013)

This is a **covert reanalysis** of **03jcp**, **04bpj**, **04jpcb1**, and a **sixfold covert parallel submission** of the very same *q* wavelet analysis with **13amse1**, **13ecb**, **fbp**, **13jcpbp**, **13jncs**. The same three scalograms are shown in Fig 3a,b,c of **13amse1**, Fig 3 of **13cp4**, and Fig 1 of **13ecb**.

13cp5 (#253, submission undated) **U**
A neutron scattering study on the stability of trehalose mycolates under thermal stress
F Migliardo*, C Salmeron, N Bayan
Chemical Physics 424 [see above], 70-74 (2013)

Mycolic acids and lecithin:H by QENS (IRIS, OSIRIS).

13cp6 (#254, submission undated) **D**
Glycerol, trehalose and glycerol–trehalose mixture effects on thermal stabilization of OCT
D Barreca*, G Laganà, S Magazù, F Migliardo, E Bellocco
Chemical Physics 424 [see above], 100-104 (2013)

Covert compilation of two rather unrelated studies:

- Thermal stability and viscosity of an enzyme solution.
- T/G mixtures investigated by QENS (IRIS and OSIRIS) ⇒ **Covert duplicate** of **10jcp** and **11jncs2**. The main frames of Figs 1,2,3 are Figs 1,2,3 of **11jncs2**; the insets come from Fig 4 of **11jncs2**.

13ecb (#255, submitted 11jan13) **P**
Bioprotectant Effectiveness of Homologous Disaccharides by Elastic Incoherent Neutron Scattering
F Migliardo*, MT Caccamo, S Magazù
European Chemical Bulletin 2 (6), 397-400 (2013)

This is a **covert reanalysis** of **03jcp**, **04bpj**, **04jpcb1**, and a **sixfold covert parallel submission** of the very same *q* wavelet analysis with **13amse1**, **13cp4**, **fbp**, **13jcpbp**, **13jncs**. The same three scalograms are shown in Fig 3a,b,c of **13amse1**, Fig 3 of **13cp4**, and Fig 1 of **13ecb**.

While the experimental section reports on (M,S,T):(6,19)H by IN13, there are no data shown for (M,S,T):6H. Fig 1 shows S:19H at three temperatures; Fig 2 is said to show "sucrose" and "trehalose", but since this is the only mentioning of pure sugars in the paper, it remains uncertain whether the figure does not rather show aqueous solutions.

13fbp (#256, submitted 11apr13) **P**
Thermal Analysis on Bioprotectant Disaccharides by Elastic Incoherent Neutron Scattering
F Migliardo*, MT Caccamo, S Magazù
Food Biophysics, 1-6 (2013)

This is a **covert reanalysis** of **03jcp**, **04bpj**, **04jpcb1**, and a **sixfold covert parallel submission** of the very same *q* wavelet analysis with **13amse1**, **13cp4**, **ecb**, **13jcpbp**, **13jncs**.

13jmpee (#257) **N**
Measurement of Output Power Density from Mobile Phone as a Function of Input Sound Frequency
E Calabrò, S Magazù
Journal of Microwave Power and Electromagnetic Energy 47 (4), 270-279 (2013)

13jms (#258, submitted 19apr13) **D**
Infrared, Raman and INS studies of poly-ethylene oxide oligomers
F Migliardo*, S Magazù, MT Caccamo
Journal of Molecular Structure 1048, 261-266 (2013)

Multiresolution wavelet transform is employed for a **covert reanalysis** of different experiments on E,P(106,...,3k4):

- FTIR
- Raman 90deg VV & VH -40..+80 C
- TOSCA: P(200,400,600) 17 K ⇒ **Covert duplication** of **05jps1** (Fig 6 here is Fig 2 there).

13jncs (#259, submitted 4mar13) **P**
Elastic incoherent neutron scatterings wavevector and thermal analysis on glass-forming homologous disaccharides
F Migliardo*, MT Caccamo, S Magazù
Journal of Non-Crystalline Solids 378, 144-151 (2013)

This is a **covert reanalysis** of **03jcp**, **04bpj**, **04jpcb1**, and a **sixfold covert parallel submission** of the very same q wavelet analysis with **13amse1**, **13cp4**, **ecb**, **13jcpbp**, **13fbp**.

13jpcbp (#260, submitted 20apr13) **P**
Thermal Properties Investigation on Systems of Biophysical Interest by EINS and Wavelet Analysis
F Migliardo*, MT Caccamo, S Magazù
J Phys Chem Biophys 3 (118), 2161-0398.1000118 (2013)

This is a **covert reanalysis** of **03jcp**, **04bpj**, **04jpcb1**, and a **sixfold covert parallel submission** of the very same q wavelet analysis with **13amse1**, **13cp4**, **ecb**, **13fbp**, **13jncs**.

While the experimental section reports on (M,S,T):(6,19)H by IN13, there are no data shown for (M,S,T):6H. Fig 1 shows T:19H at three temperatures; Fig 2 is said to show "sucrose", "maltose", and "trehalose", but since this is the only mentioning of pure sugars in the paper, it remains uncertain whether the figure does not rather show aqueous solutions (just as in **13ecb**).

13omcl (#261) **N**
50 Hz Electromagnetic Field Produced Changes in FTIR Spectroscopy Associated with Mitochondrial Transmembrane Potential Reduction in Neuronal-Like SH-SY5Y Cells
E Calabrò, S Condello, M Currò, N Ferlazzo, M Vecchio, D Caccamo, S Magazù, R Ientile*
Oxidative medicine and cellular longevity (2013)

13sl (#262) **N**
Unfolding and Aggregation of Myoglobin Can Be Induced by Three Hours' Exposure to Mobile Phone Microwaves: A FTIR Spectroscopy Study
E Calabrò*, S Magazù
Spectroscopy Letters 46 (8), 583-589 (2013)

2014 papers

14ijbmm (#263, submitted FTIR,) **D**
ESI-MS, VT-NMR and SANS study of trehalose thermal stabilization of lysozyme
D Barreca*, G Laganà, S Magazù, F Migliardo, G Gattuso, E Bellocco
International journal of biological macromolecules 63, 225-232 (2014)

Covert compilation of experiments on L:D[:T], apparently enriched by new data:

- FTIR.
- NMR spectra.
- SANS (LOQ) at 310, 333, 363 K. **Covert duplicate** of **07jms2** where LOQ measurements at 310 and 333 K have been reported. Fig 10a,b here is Fig 5a there.

14sl (#264, submission undated) **D**
Non-Thermal Effects of Microwave Oven Heating on Ground Beef Meat Studied in the Mid-Infrared Region by Fourier Transform Infrared Spectroscopy
E Calabrò*, S Magazù
Spectroscopy Letters (online 2013)

Covert duplicate of **12jemaa**: Same research idea, very similar sample, same experiment, slightly refined protocol, enhanced data set (spectra of raw meat shown in addition to spectra after thermal and microwave cooking).

Automatically generated statistics

G 8 ignorable genre
N 61 not investigated
U 47 unsuspicious
P 57 covert parallel submission
Q 16 covert parallel submission? (dates missing)
D 67 covert duplication (other than P)
B 8 borderline to covert duplication

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