Nuove proprietà Chimico-fisiche dell'acqua

V. Elia, E. Napoli & M. Niccoli

Pulsatilla

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Nux Vomica

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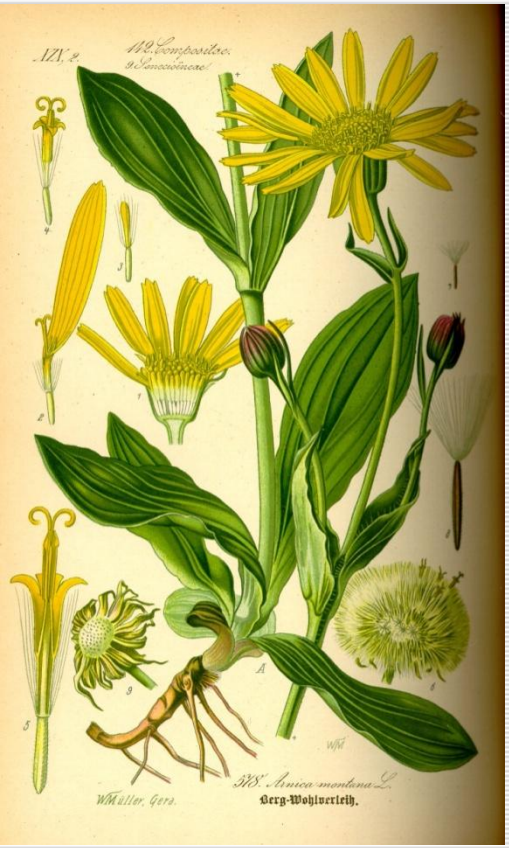
Sponsors :

- ***REGIONE CAMPANIA***

Assessorato alla Sanità MNC Cap. 1700

- ***BOIRON***



Arnica Montana

Dipartimento di Chimica

32. V.Elia, E.Napoli, M.Niccoli
"Calorimetric and Conductometric Titrations of Nanostructures of Water Molecules in Iteratively Filtered Water"
JTAC, 2011, Submitted

31. V.Elia, N. Marchettini, E.Napoli, E. Tiezzi
"Nanostructures of Water Molecules in Iteratively Filtered Water"
JOAM, 2011 Submitted

30. V.Elia, E.Napoli
"Nanostructures of Water Molecules in Iteratively Filtered Water"
IC-MAST, 2011(key Engineering materials) Accepted

29. L.Betti, V.Elia, E. Napoli ,G.Trebbi, M.Zurla, D.Nani ,M.Peruzzi, M.Brizzi
"Biological effects and physico-chemical properties of extremely diluted aqueous solutions as a function of aging-time"
FLS, 2011, In press

28. T.M.P.Cattaneo, S.Vero, E.Napoli, V.Elia
" Influence of Filtration Processes on Aqueous Nanostructures by NIR Spectroscopy"
JCHE, 2011 Online

27. V.Elia, L.Marrari, E.Napoli
"Aqueous Nanostrutture in water induced by Electromagnetic Field Emitted by EDS.
A Conductometric Study of Fullerene and Carbon Nanotube EDS.
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25. M.Brizzi, V.Elia, G.Trebbi, D.Nani, M.Peruzzi, L.Betti
"The Efficacy of Ultramolecular Aqueous Dilutions on a Wheat Germination Model as a Function of Heat and Aging-Time"
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24.T.M.P.Cattaneo, S.Vero, E.Napoli, V.Elia
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23. V.Elia, E.Napoli, M.Niccoli
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Calorimetric and Conductometric Titrations
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22. V.Elia, E.Napoli
"Dissipative Structures in Extremely Diluted Solutions of Homeopathic Medicines. A Molecular Model based on Physico-Chemical and Gravimetric evidences"
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"A Molecular Model of Interaction between of Extremely Diluted Solutions and NaOH Solutions Used as Titrant. Conductometric and pHmetric Titrations."
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20. C.M.Cacace, L.Elia, V.Elia, E.Napoli, M.Niccoli
"Conductometric and pHmetric Titrations of Extremely Diluted Solutions Using HCl Solutions as Titrant. A Molecular Model."
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19. E.Del Giudice, V.Elia, E. Napoli, A.Tedeschi
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18. L.Ciavatta, V. Elia, E. Napoli, M. Niccoli
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“No one really understands water. It’s embarrassing to admit it, but the stuff that covers two-thirds of our planet is still a mystery. Worse, the more we look, the more the problems accumulate: new techniques probing deeper into the molecular architecture of liquid water are throwing up more puzzles.” said P. Ball in 2008

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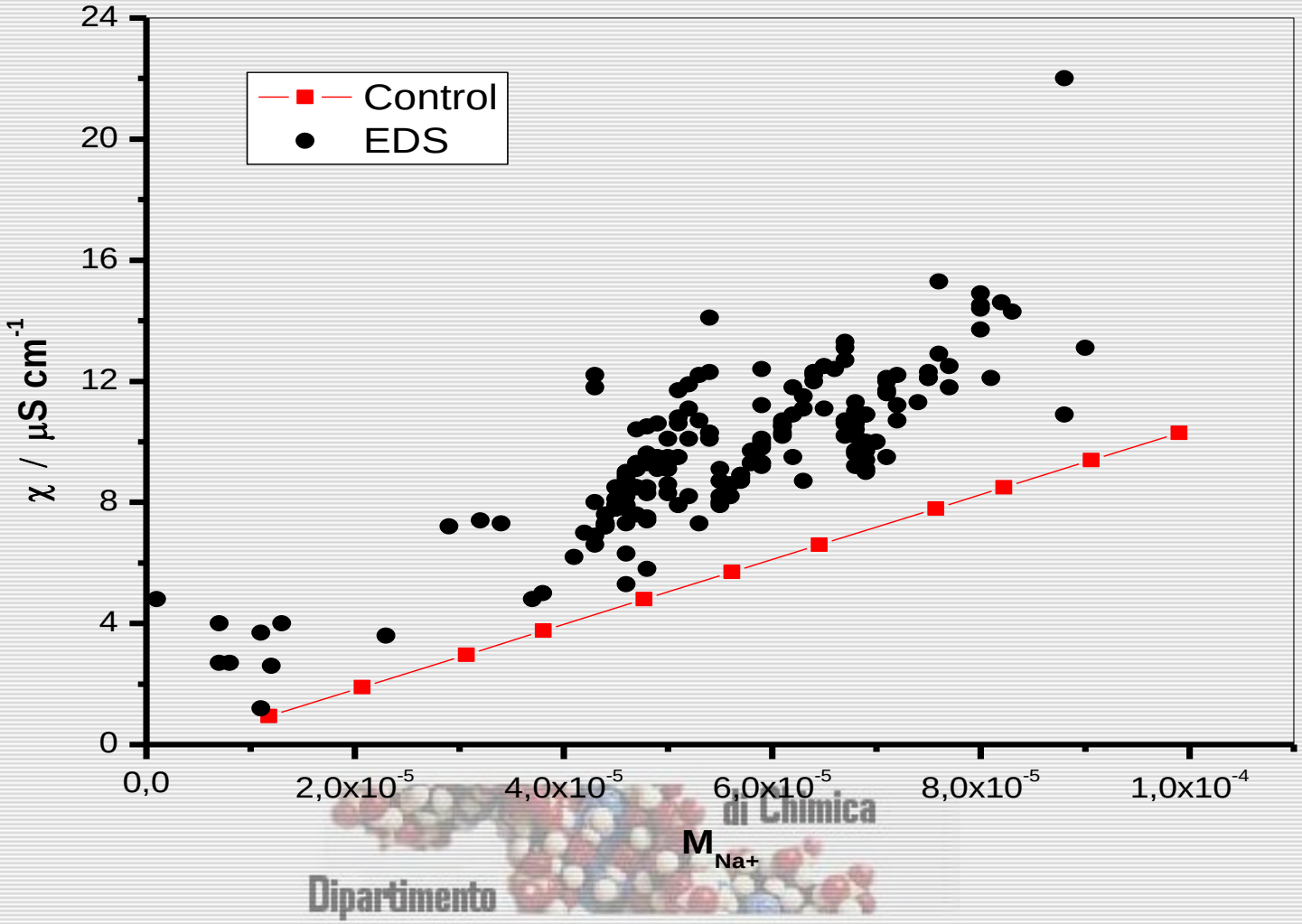
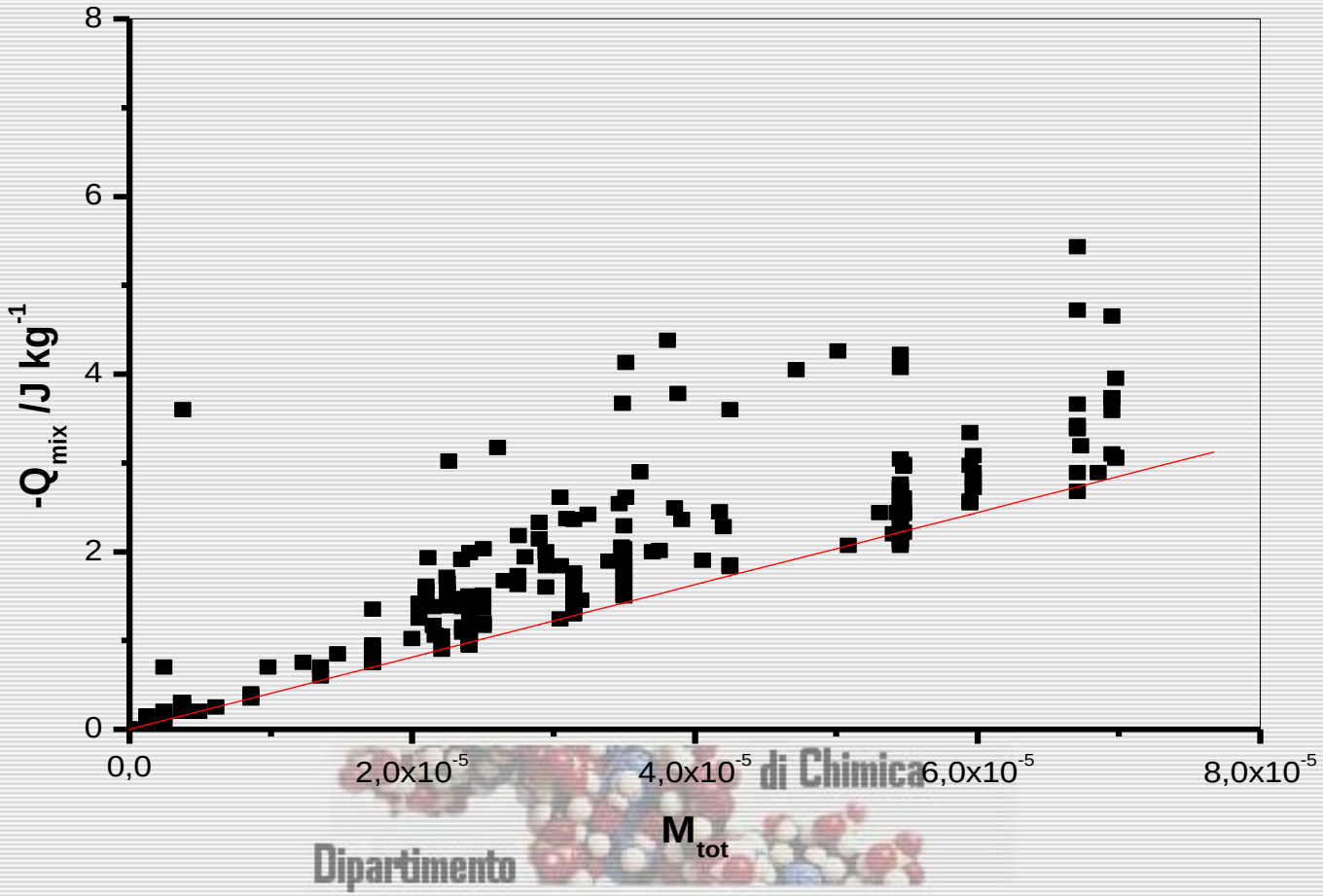
Specific Conductivity of EDS vs. Concentration of the Chemical Contents



Heat of Mixing of EDS vs Concentration of the Chemical Contents



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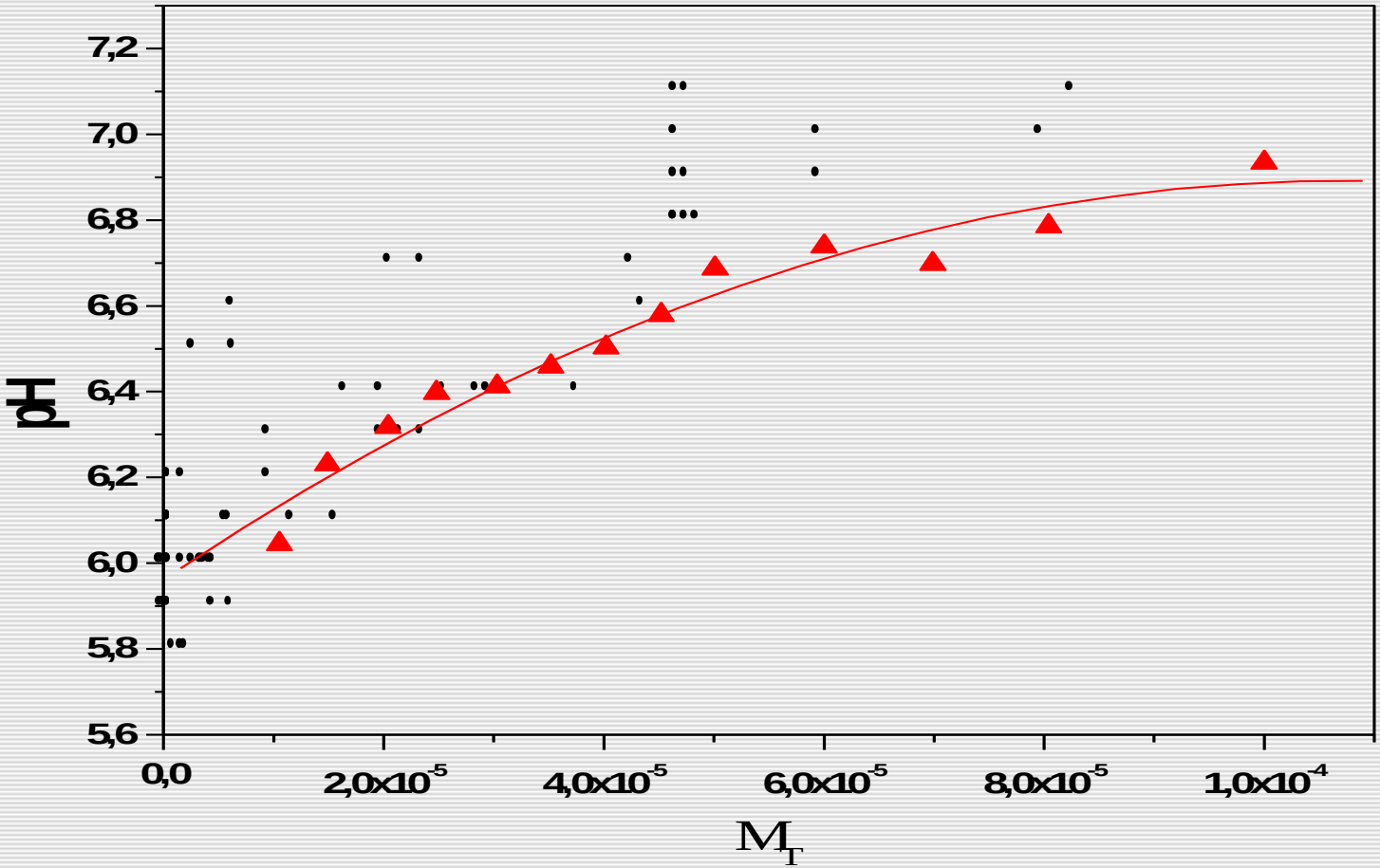
pH of EDS vs Concentrration of the Chemical Contents



V. Elia, E. Napoli, R. Germano

Homeopathy, (2007) 96, 163-169

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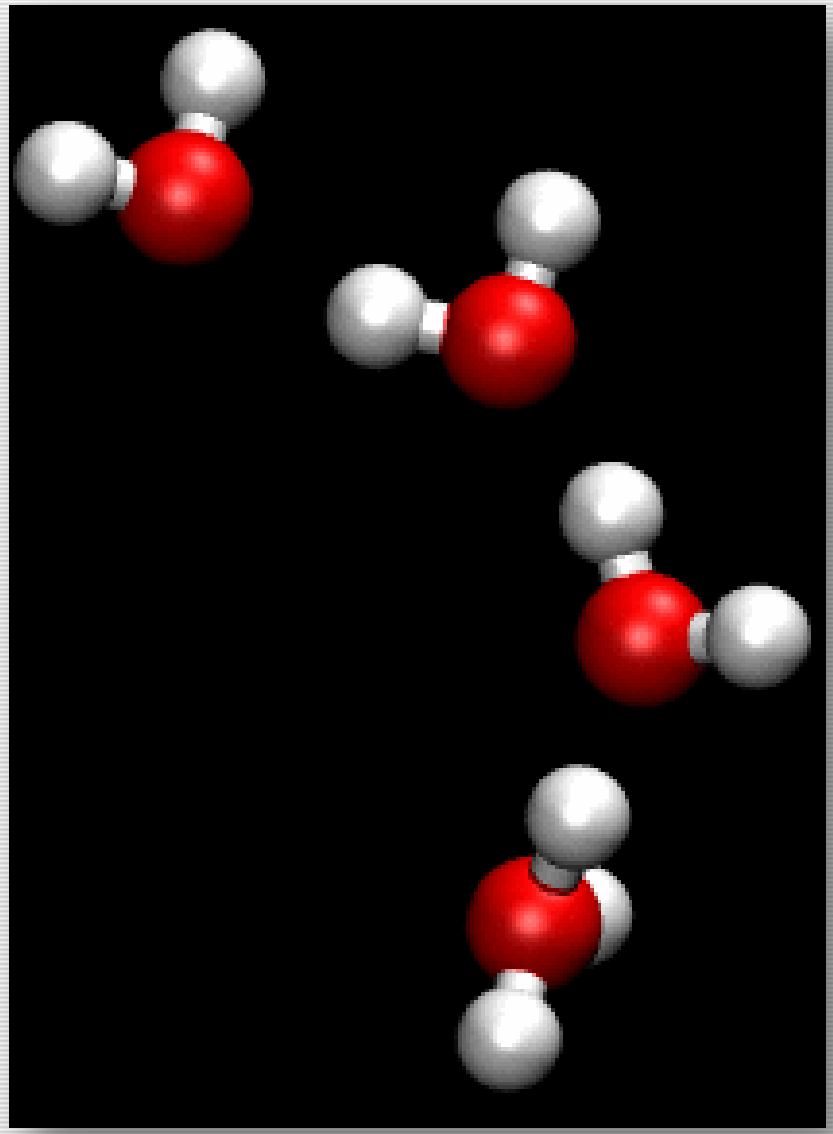

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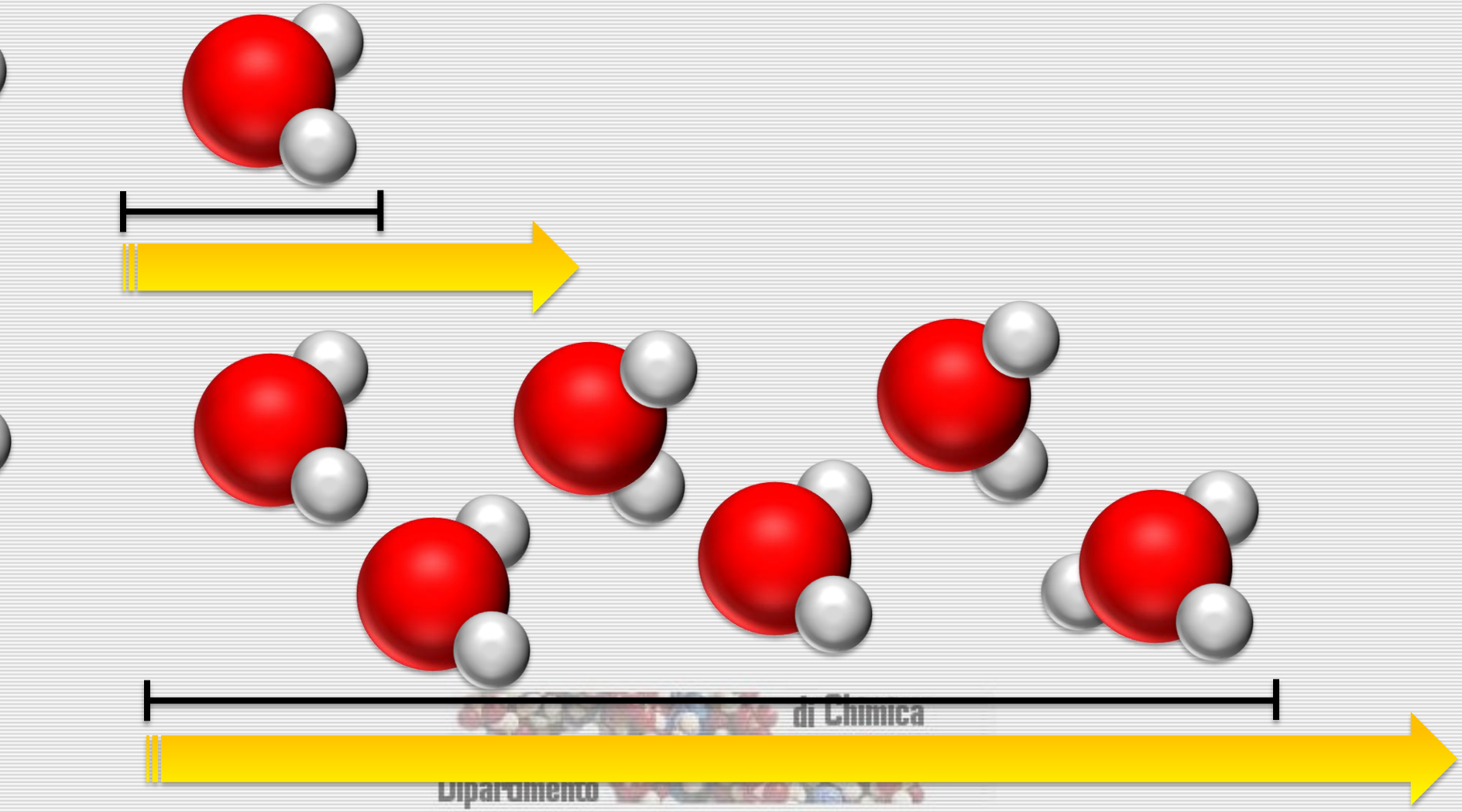

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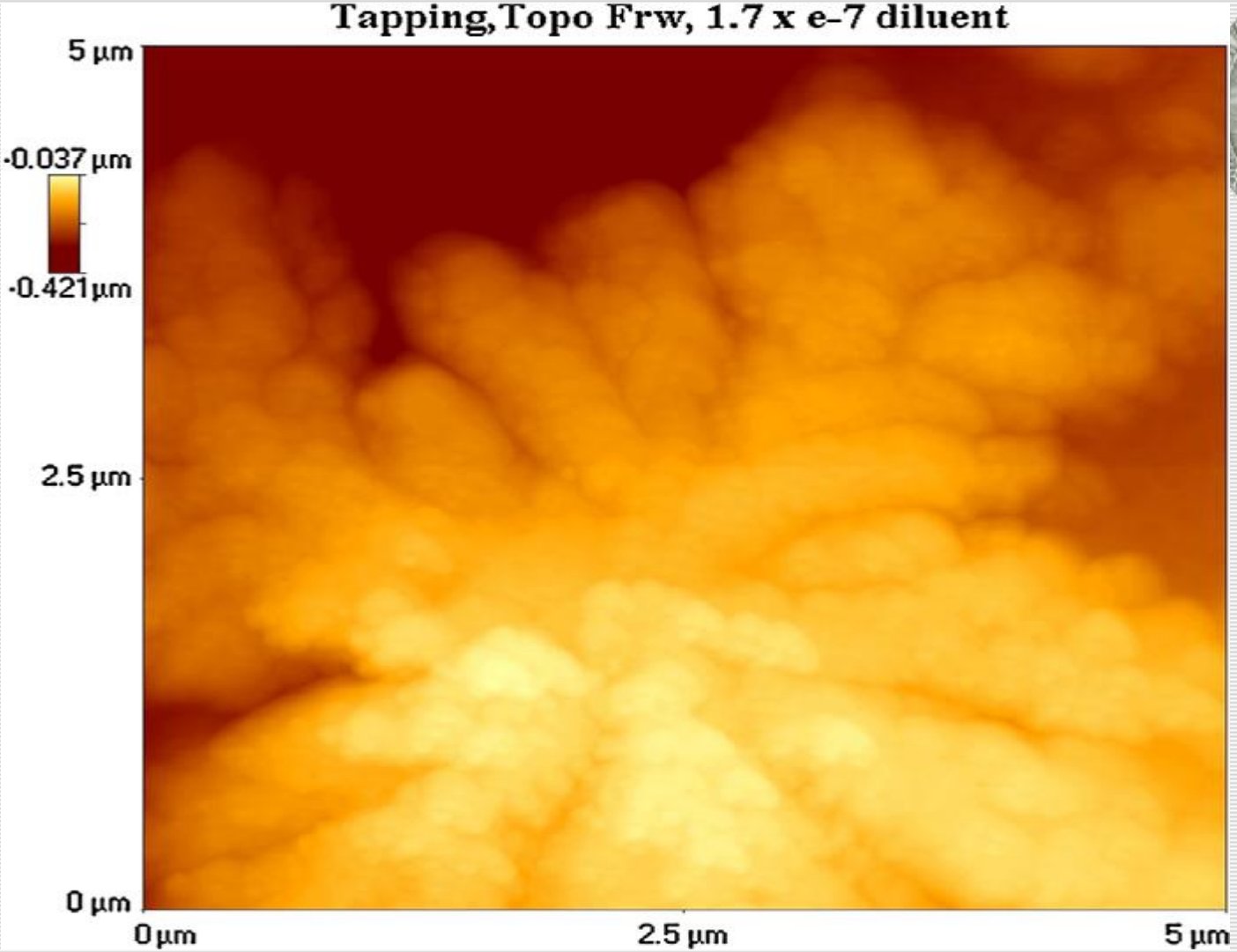

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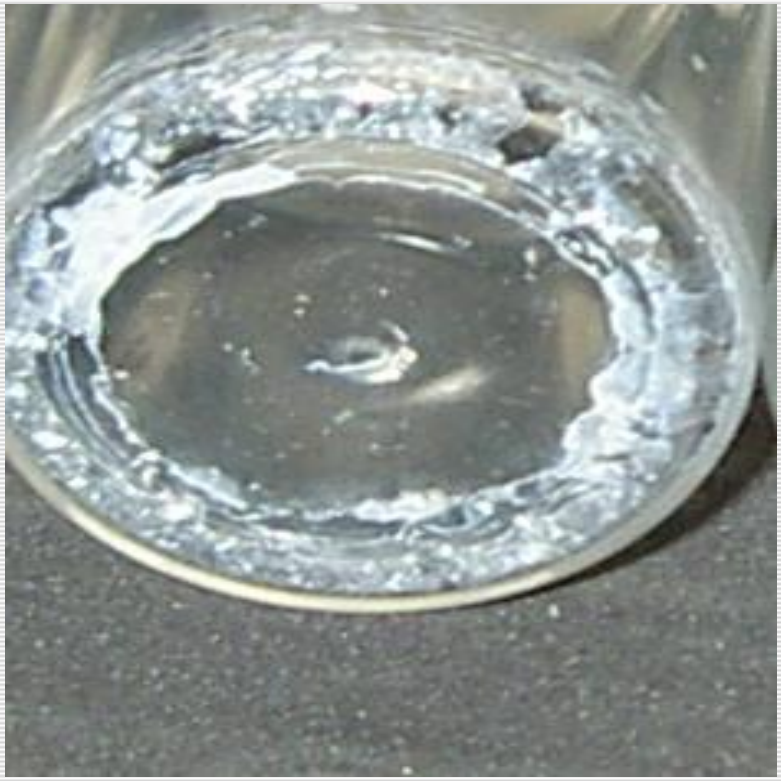
Detail



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	Na+	Xna	Xi	XE	mg Sp	mg Attesi	Δ
23	70,4	65,9	100	34,1	2,3	0,9	1,4
24	64,7	60,6	122	61,4	3,3	1,1	2,2
25	14,8	14,1	25	10,9	1,3	0,5	0,8
26	26,6	25,1	57	31,9	2,2	0,8	1,4
27	54,6	51,2	58	6,8	3,1	1,0	2,1
28	41,1	38,6	44	5,4	2,6	1,4	1,2
29	5,0	5,0	9,7	4,7	0,4	0,2	0,2
31	10,5	10,1	13	2,9	0,8	0,4	0,4
32	15,6	14,8	23	8,2	1,3	0,4	0,9
33	11,1	10,6	21	10,4	0,6	0,1	0,5
34	8,4	8,1	13	4,9	0,8	0,2	0,6
35	6,4	6,3	52	45,7	1,0	0,2	0,8
36	85,8	80,3	130	49,7	2,7	1,4	1,3

IJDN – V. Elia, E. Napoli

Dissipative Structuresin Extremely Diluted Solution of Homeopathic Medicines.AMolecular Model based on Physico-Chemical and Gravimetric evidences, 2010, Vol 5,N °1,39-48

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Table 2 **PV**

M[1]							
Al_2O_3	H_2BO_3	$H_4S_iO_4$	Na_2CO_3	X_i [2]	mg_{Expec}	mg_{Exper}	Δ_{mg}
0	$1,8*10^{-3}$	$1,3*10^{-4}$	$5,5*10^{-4}$	68	3,1	3,1	0
0	$8,2*10^{-5}$	0	$4,2*10^{-5}$	8,5	0,2	0,3	0,1
0	$6,1*10^{-4}$	$4,3*10^{-5}$	$1,8*10^{-4}$	18	1,0	1,2	0,2

[1] Molarità in mol/L^{-1} [2]Initial Conductiviy in $\mu S\ cm^{-1}$,

IJDN – V. Elia, E. Napoli
Dissipative Structuresin Extremely Diluted Solution of Homeopathic Medicines.AMolecular Model based on Physico-Chemical and Gravimetric evidences, 2010, Vol 5,N °1,39-48

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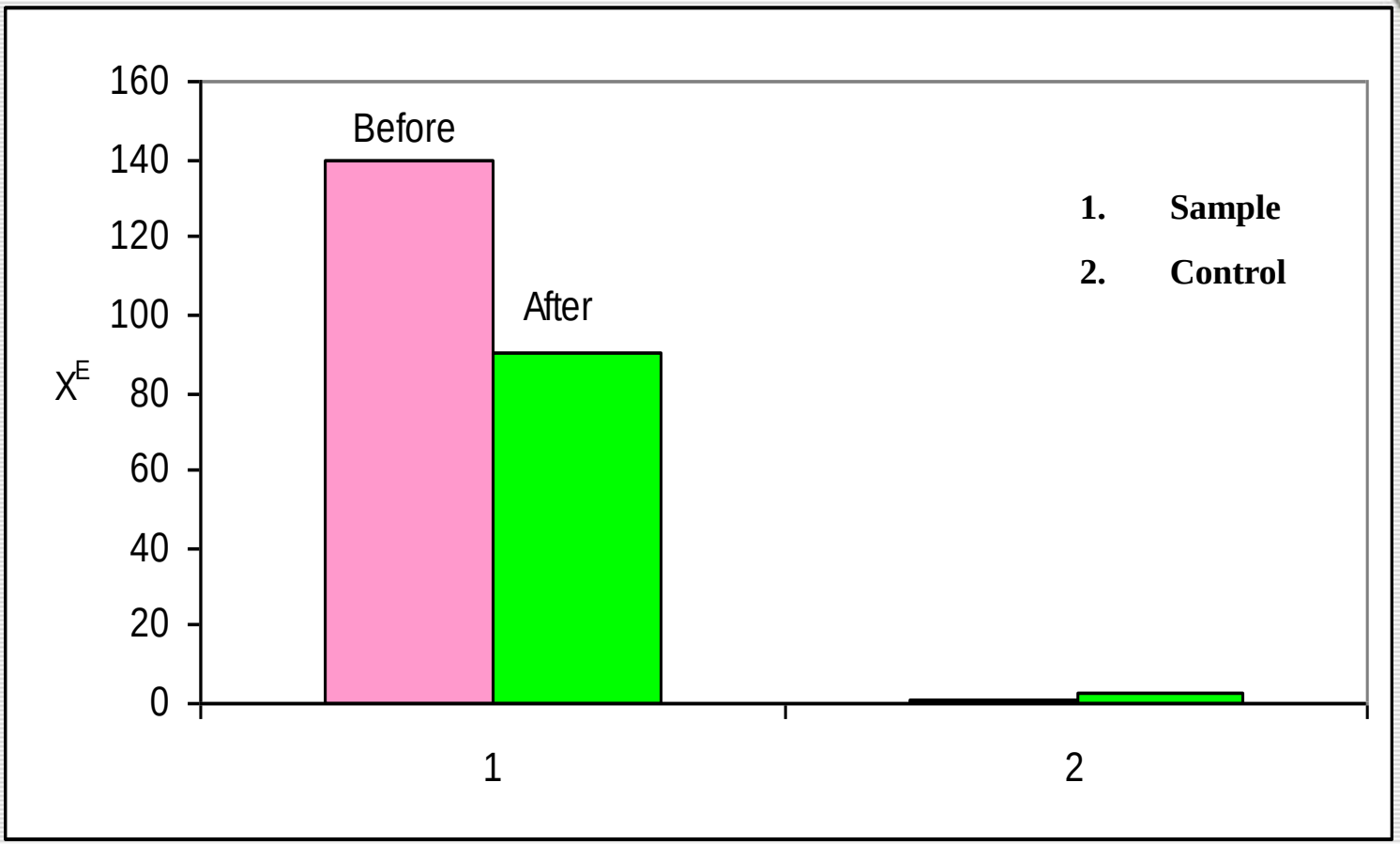
Evaporation



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Dissipative Structuresin Extremely Diluted Solution of Homeopathic Medicines.AMolecular Model based on Physico-Chemical and Gravimetric evidences, 2010, Vol 5,N °1,39-48

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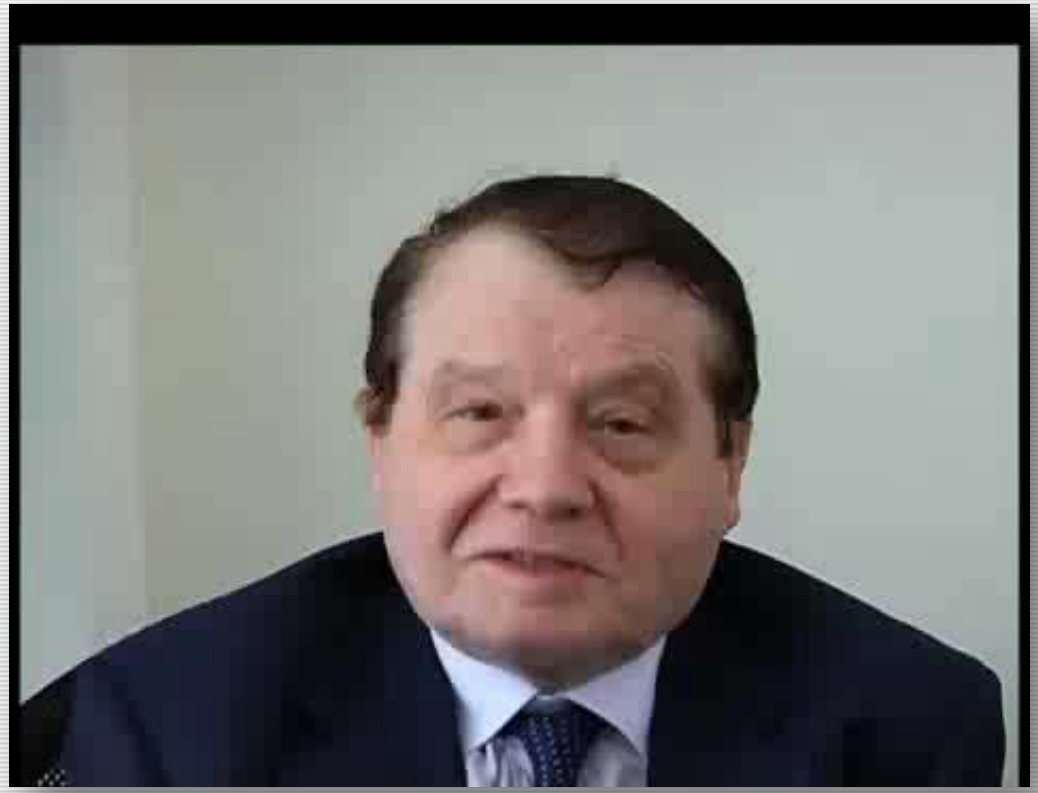
Intervista a Luc Montagnier (1/2)



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Intervista a Luc Montagnier (2/2)

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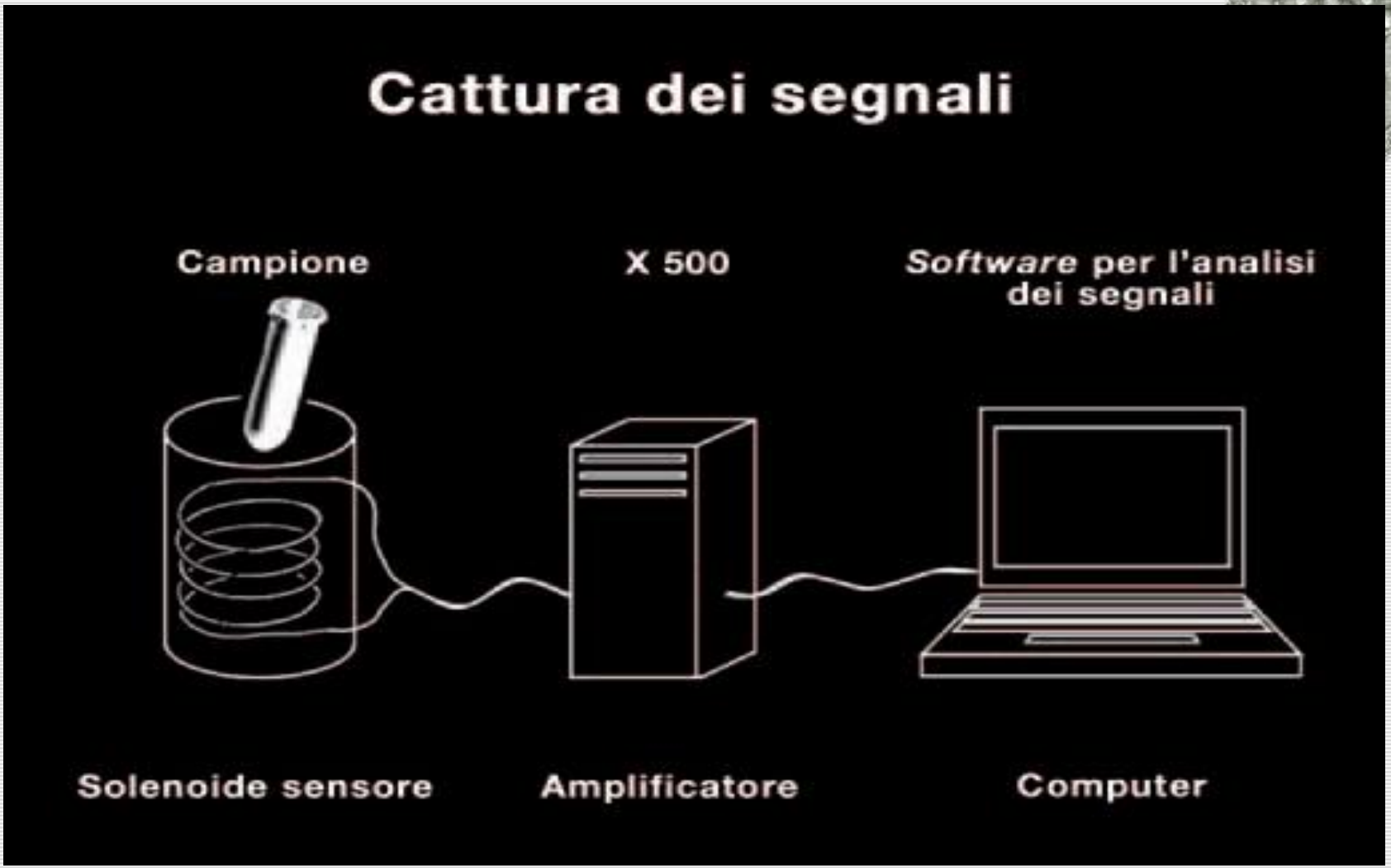

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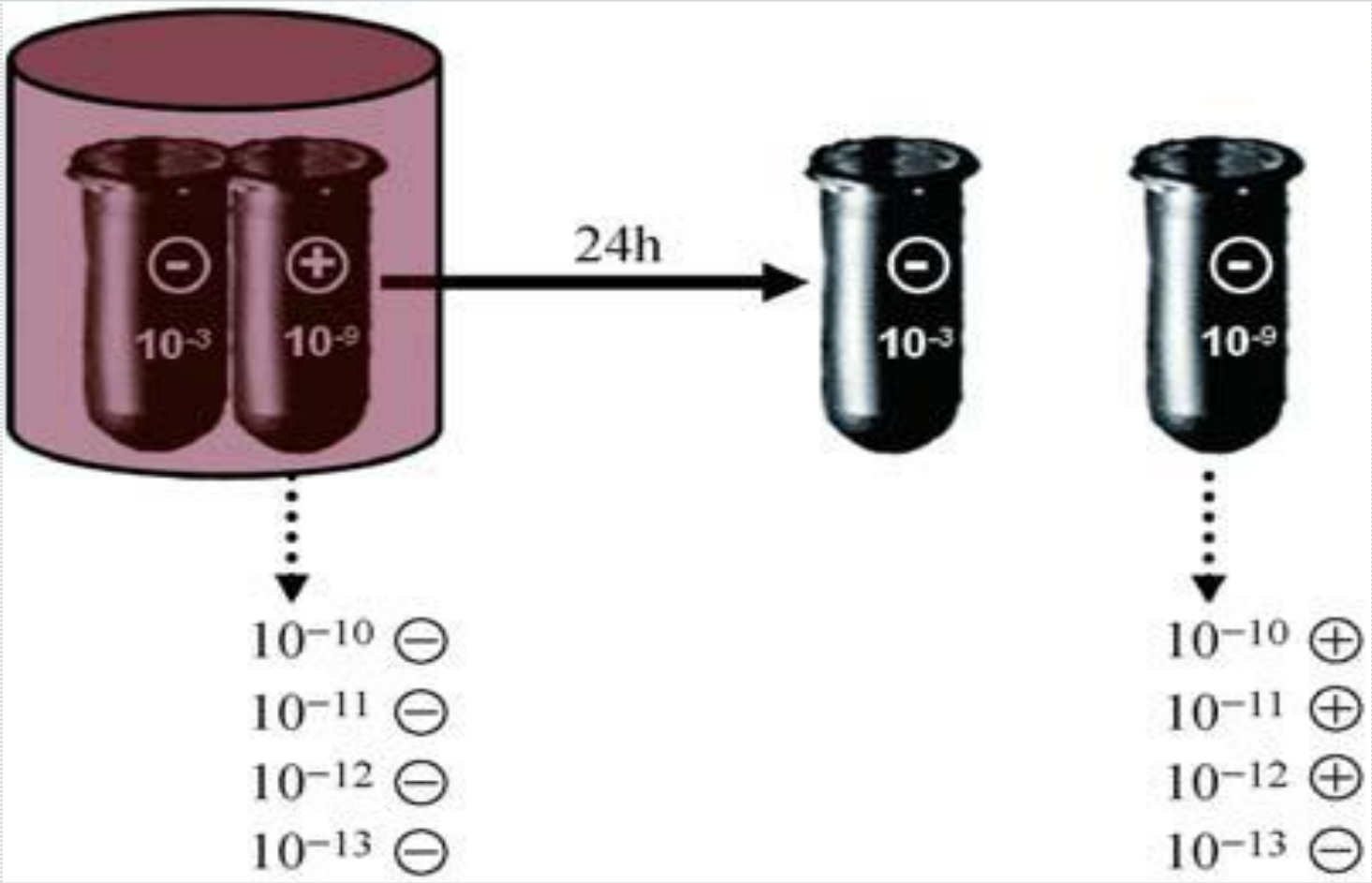

Cross-talk between dilutions (from an E.Coli 0,1 µ filtrate) Montagnier 2009 *Interdiscip Sci Comput Life Sci*

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Electromagnetic Signals of Dissipative Structures and their ageing effects

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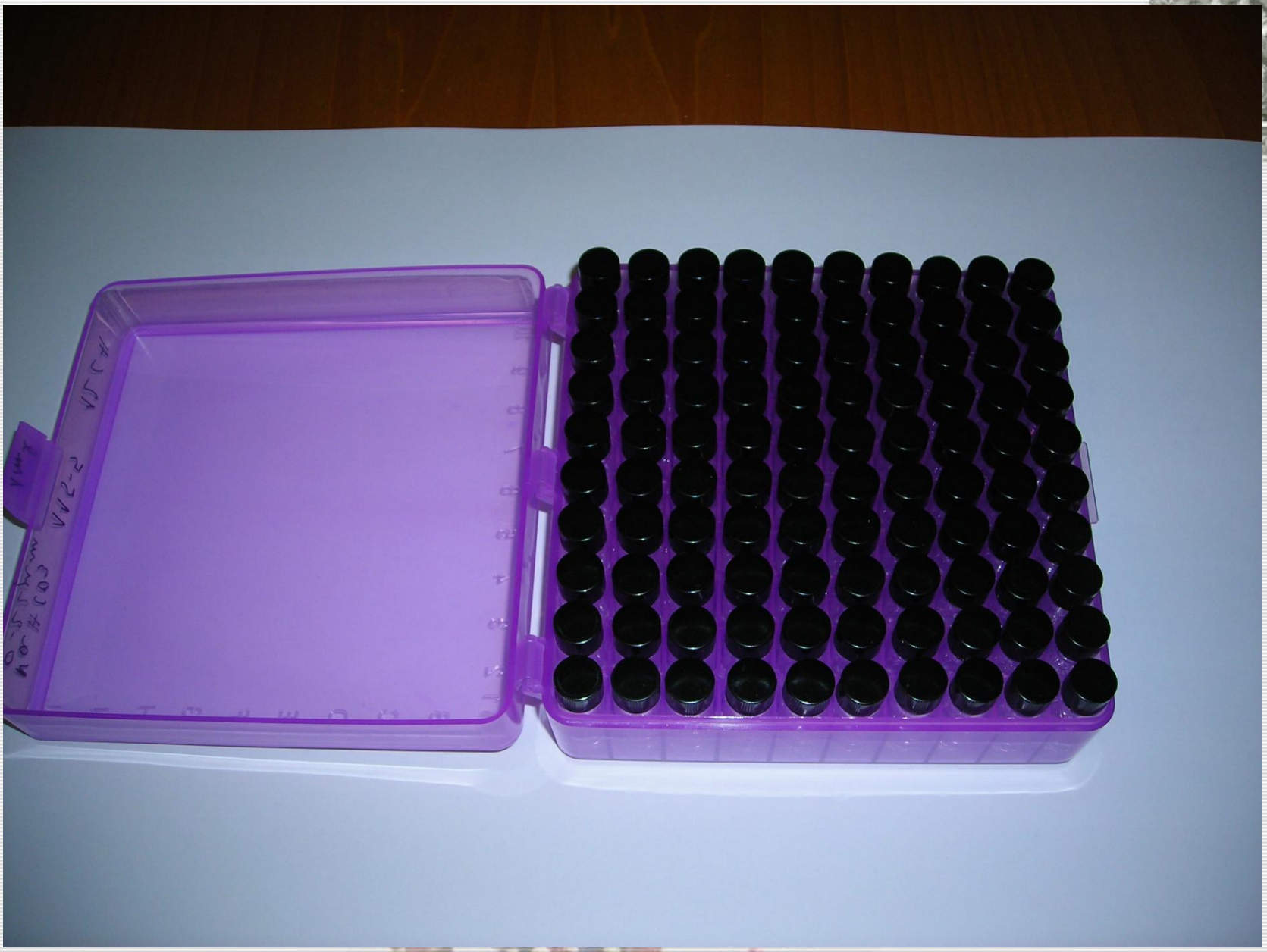
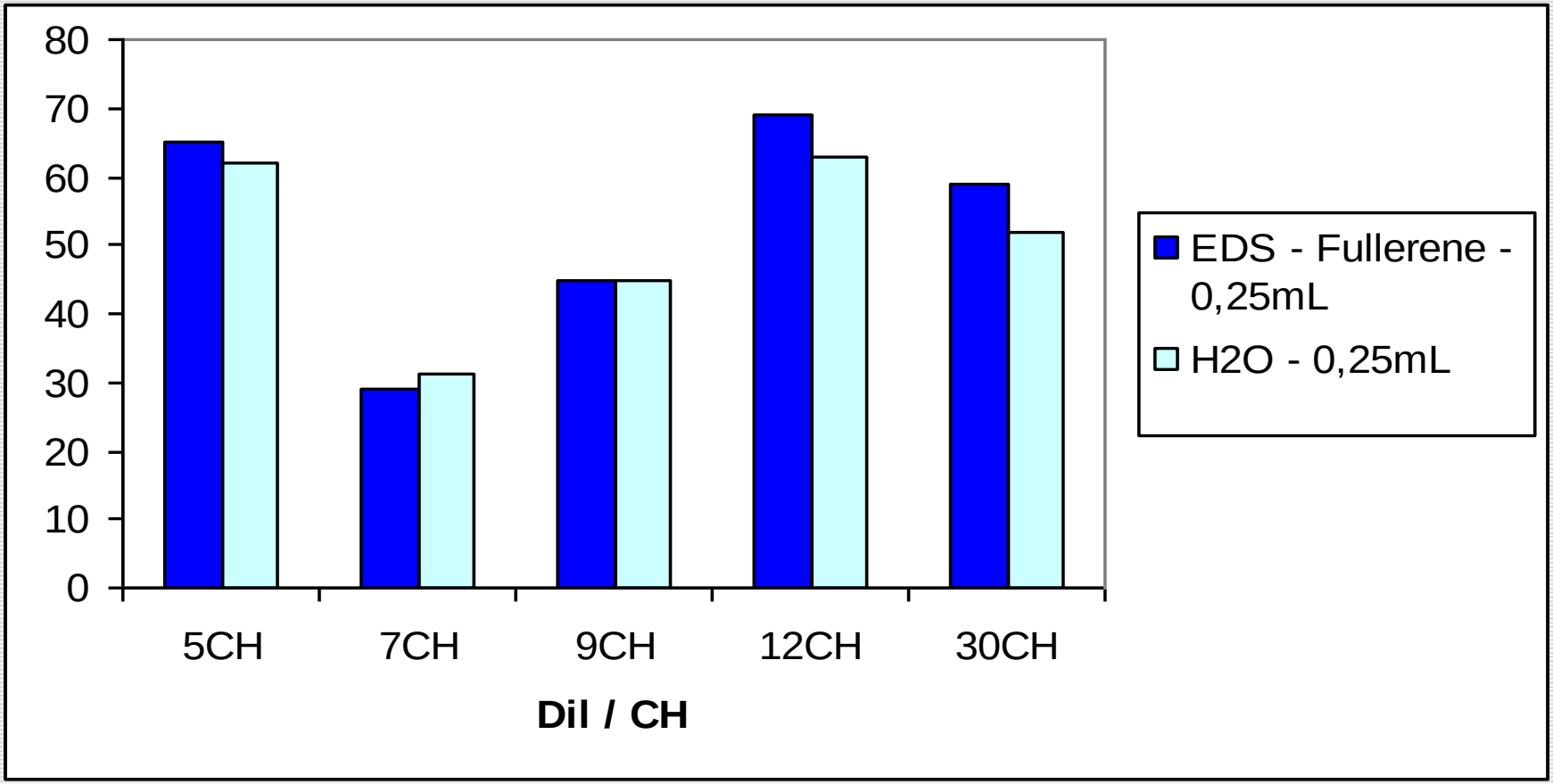


Specific Electric Conductivity of EDS and H_2O at 135 days



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Specific Electric Conductivity of EDS and H2O at 541 days

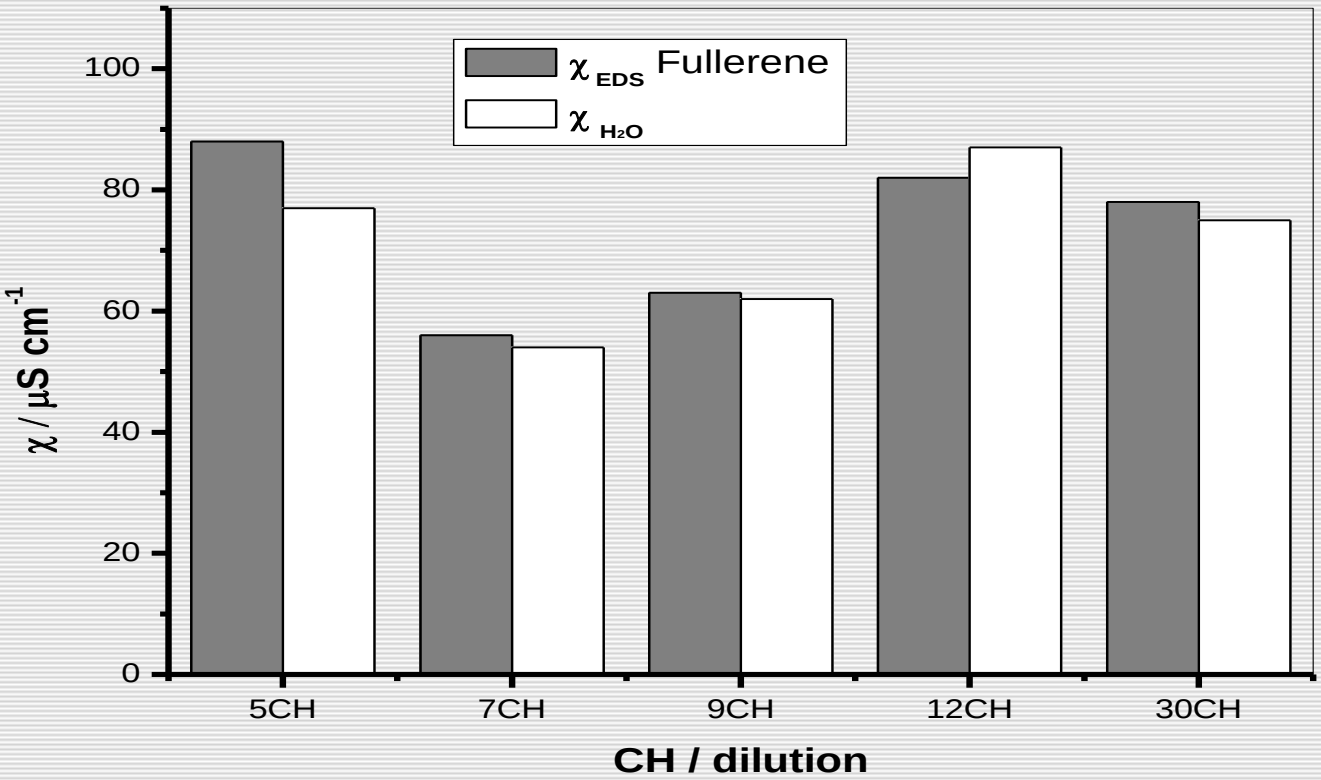

Fig.6 - Specific Electrical conductivity of EDS (Fullerene) and distilled H_2O at 541 days

V.Elia,L.Marrari, E.Napoli ,2011 JTAC , in press

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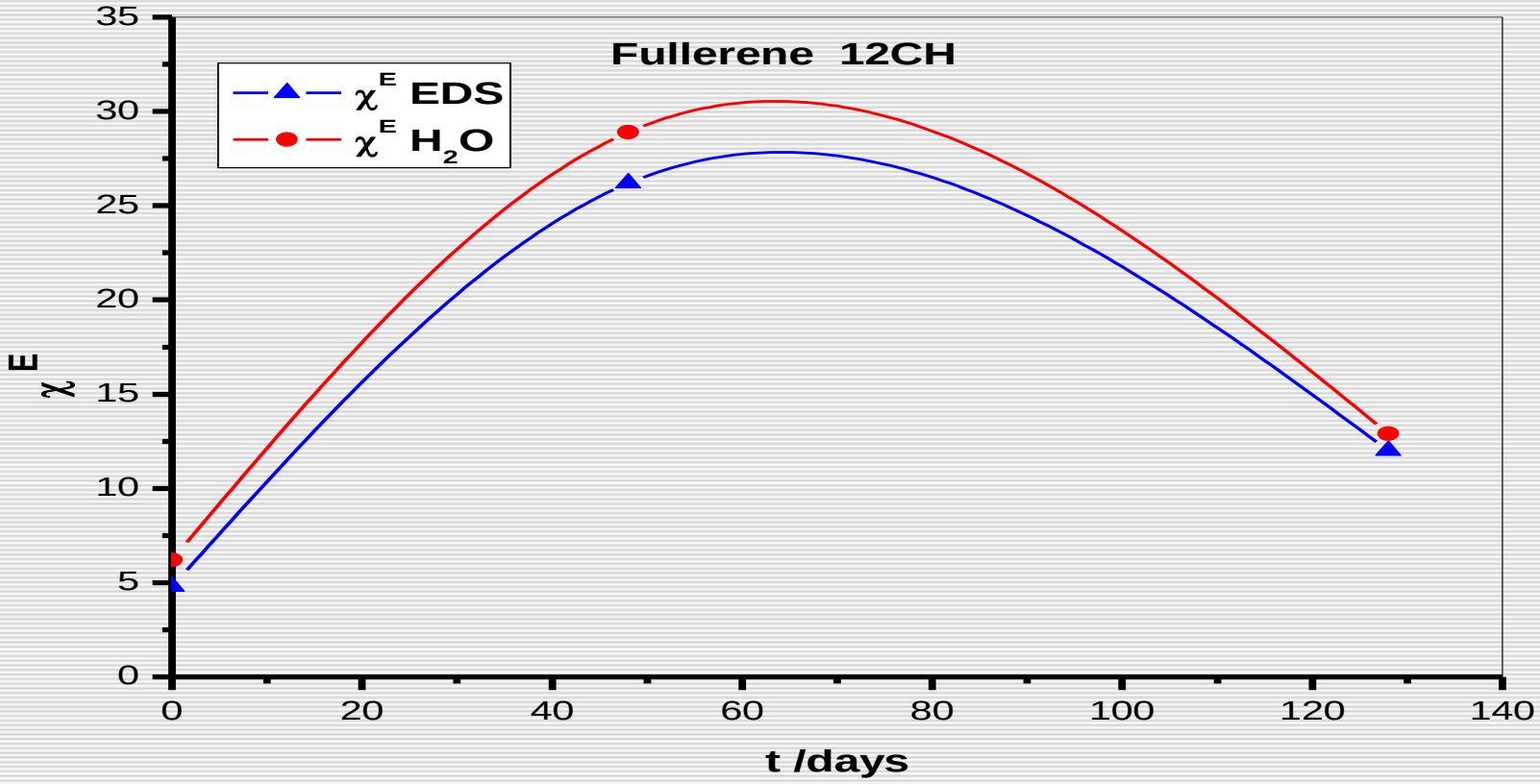
Excess Specific Electric Conductivity of EDS and H_2O vs t



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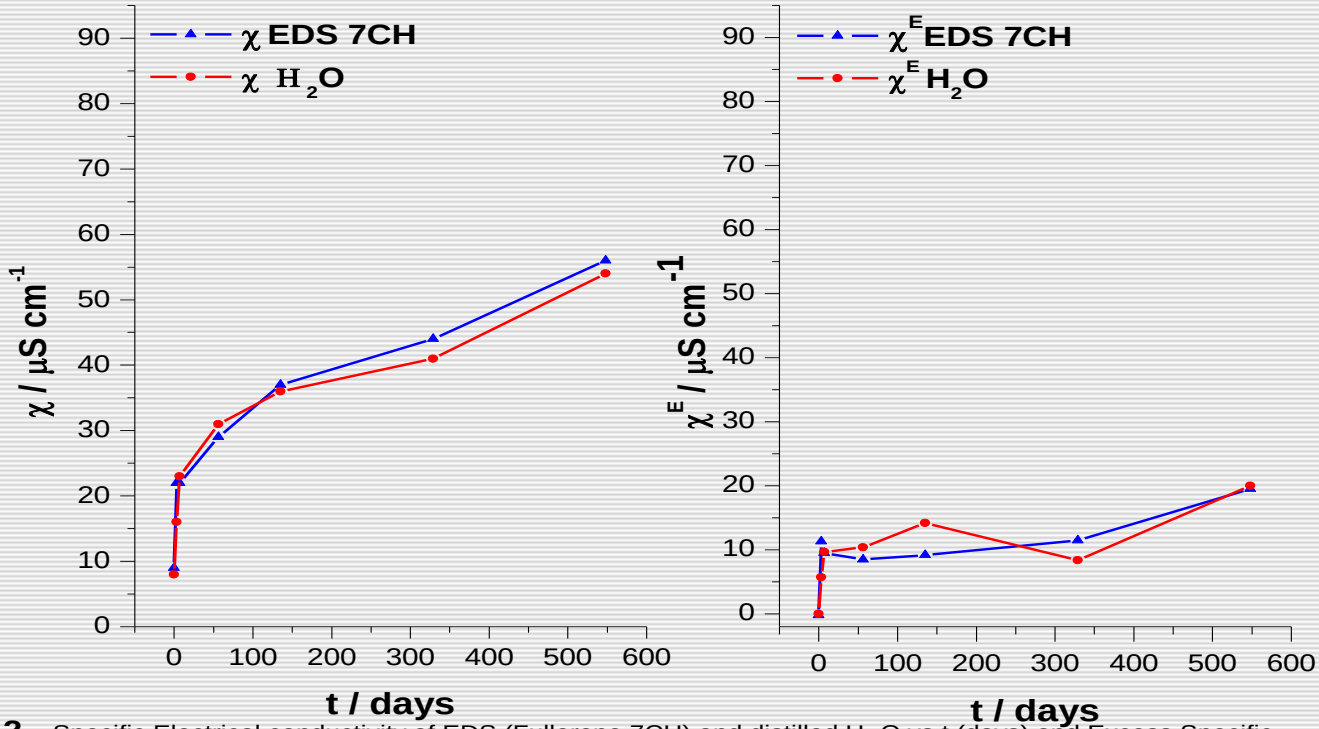

Fig.2 - Specific Electrical conductivity of EDS (Fullerene 7CH) and distilled H_2O vs t (days) and Excess Specific Electrical conductivity of EDS vs t (days)

JTAC - V. Elia,, L. Marrari, E. Napoli-
Aqueous Nanostructures In Water Induced By Electromagnetic Fields Emitted by EDS. A Conductometric Study Of Fullerene And Carbon Nanotube EDS.2011, On line

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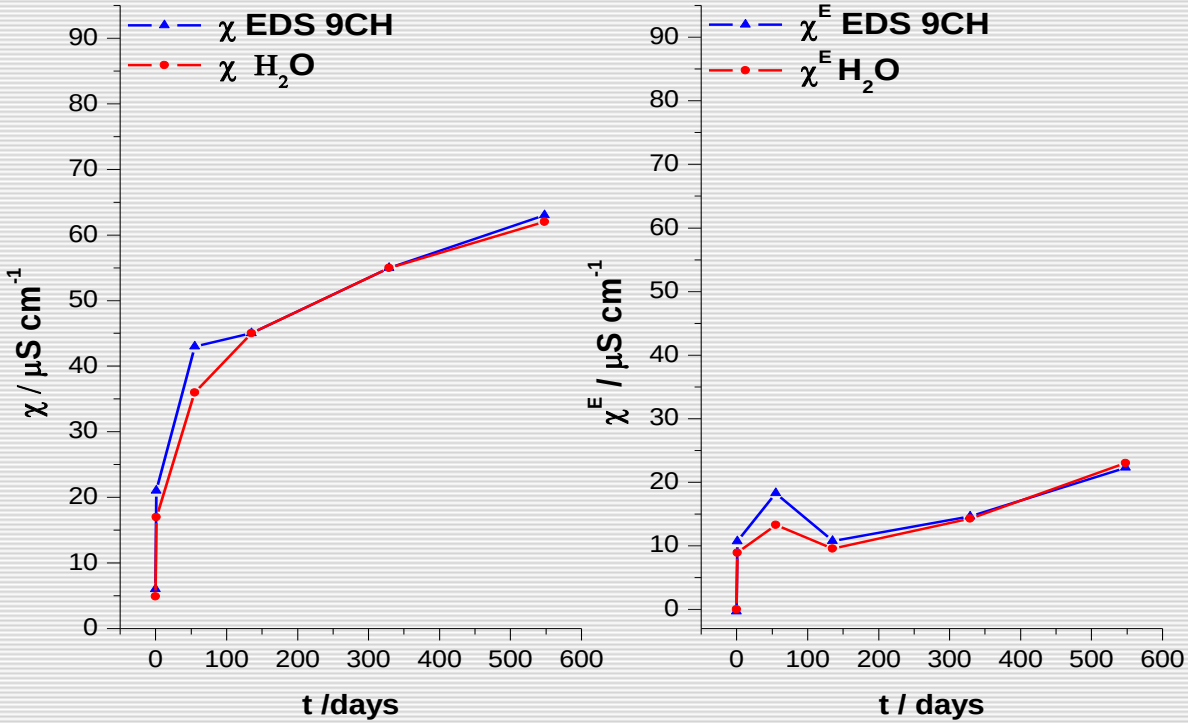

Fig.3 - Specific Electrical conductivity of EDS (Fullerene 9CH) and distilled H_2O vs t (days) and Excess Specific Electrical conductivity of EDS vs t (days)

JTAC - V. Elia,, L. Marrari, E. Napoli-
Aqueous Nanostructures In Water Induced By Electromagnetic Fields Emitted by EDS. A Conductometric Study Of Fullerene And Carbon Nanotube EDS.2011, In press

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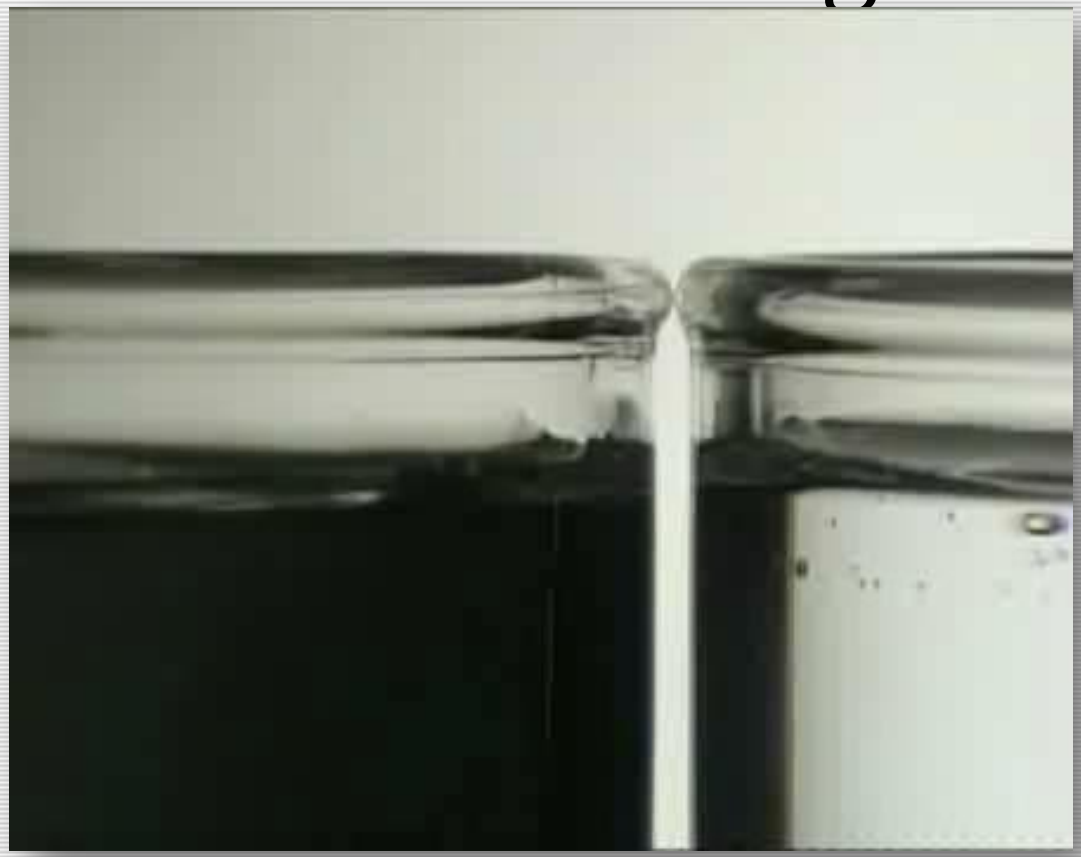
Water Bridge



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The Effect of Nafion on the Sovramolecular Structure of Water

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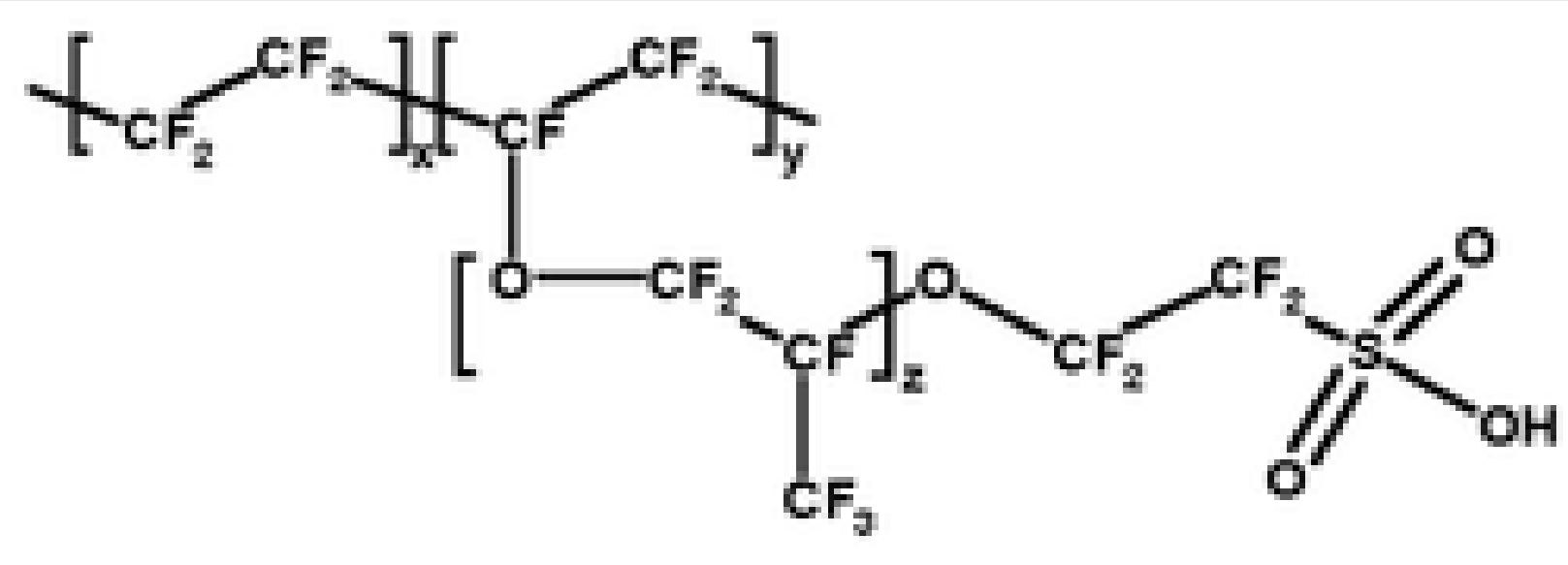

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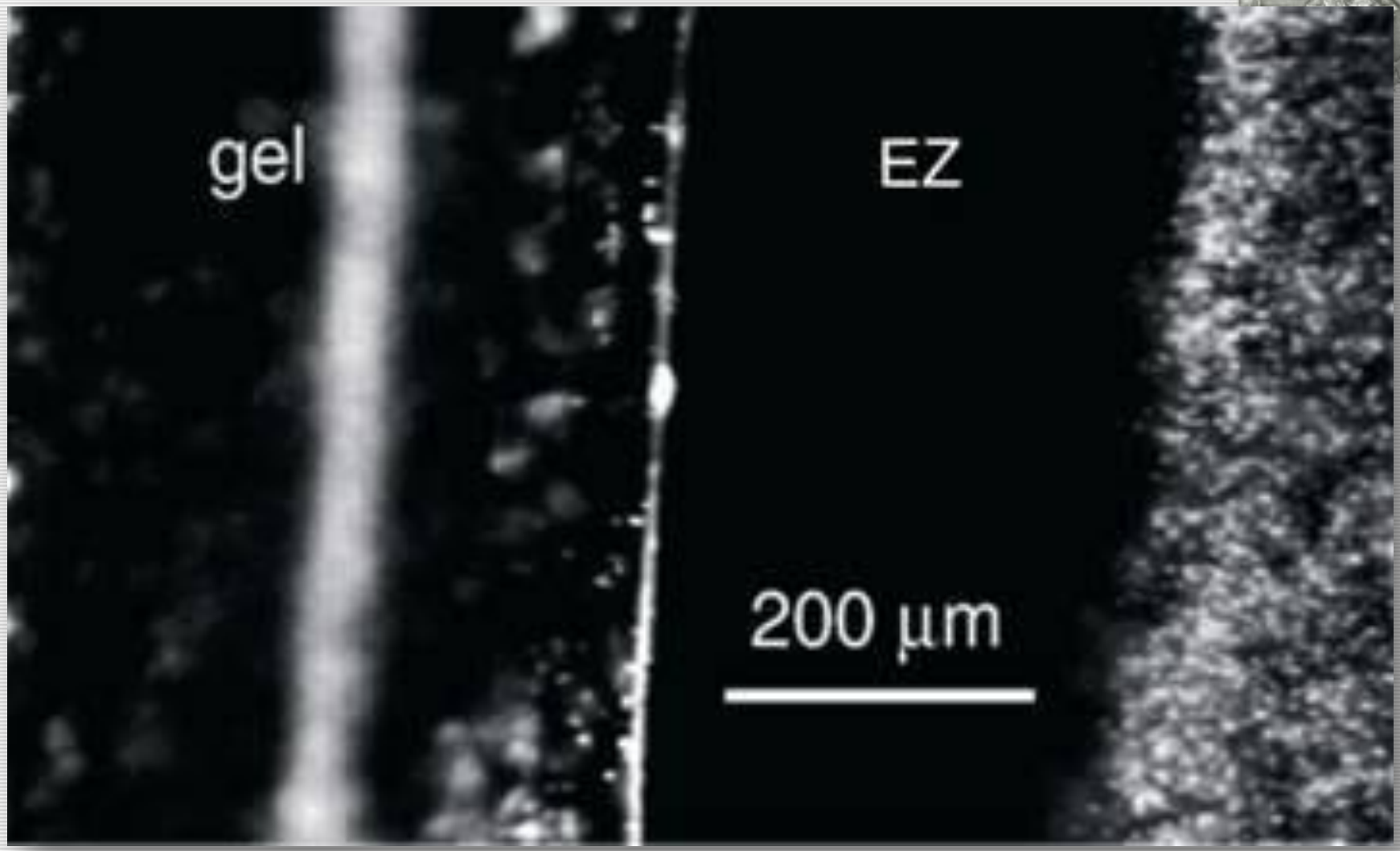

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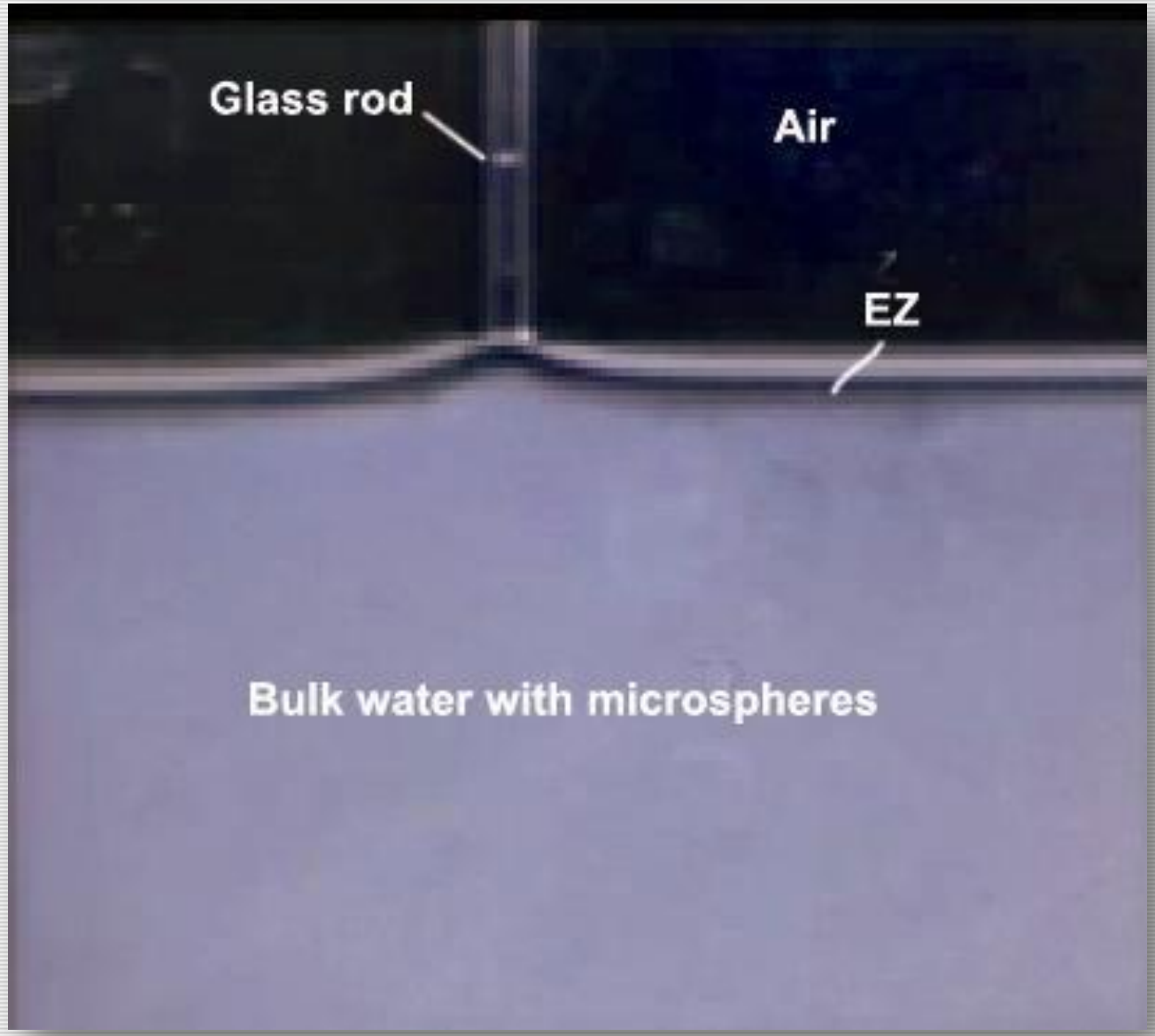

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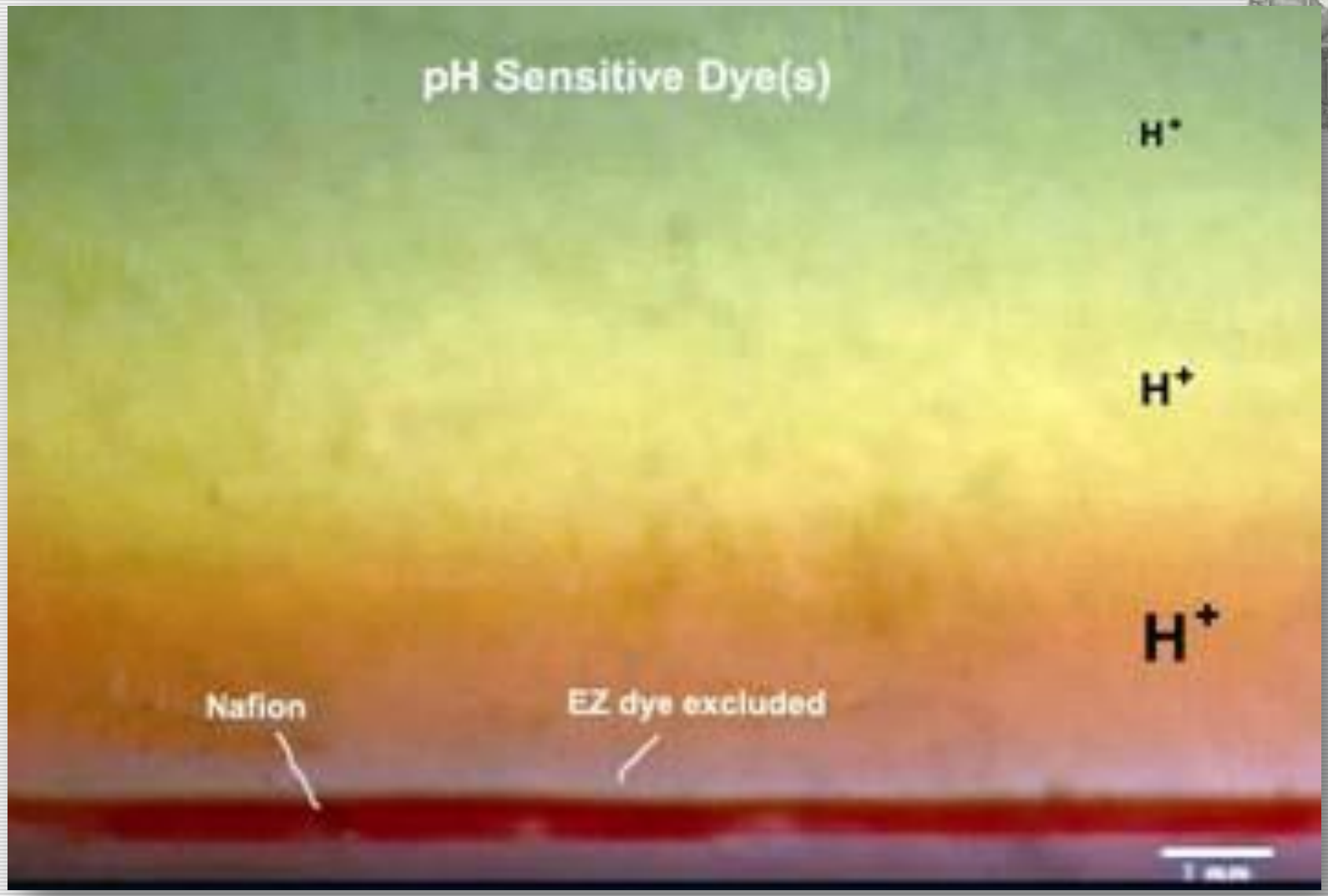

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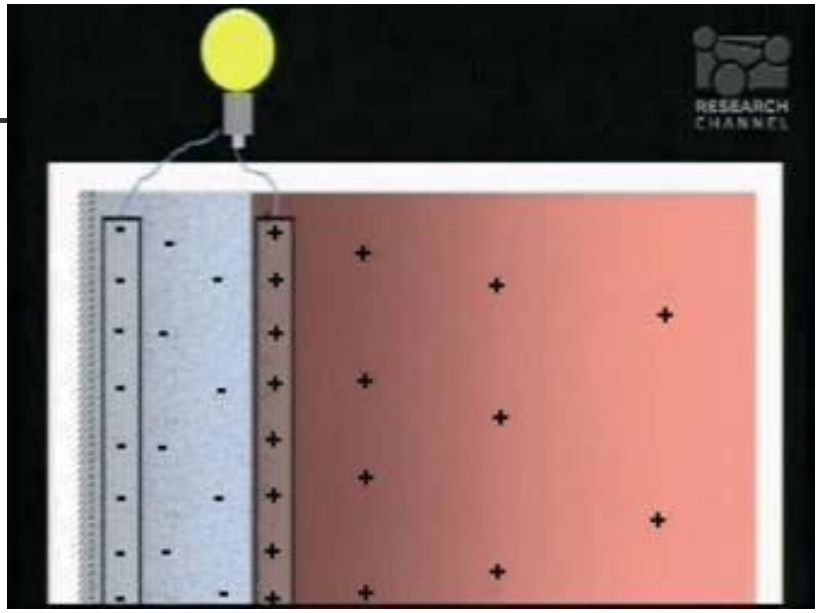
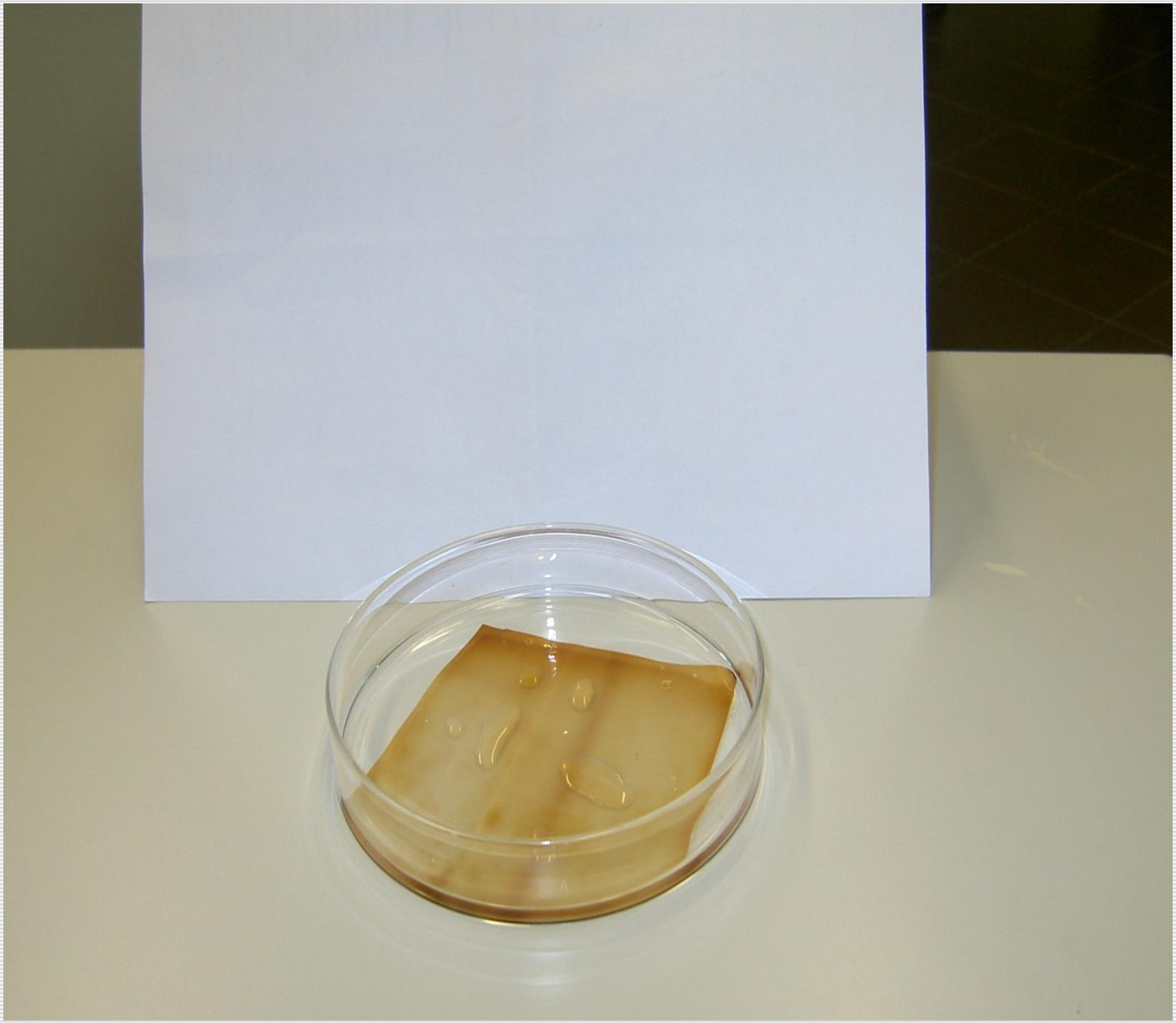

RESEARCH
CHANNEL



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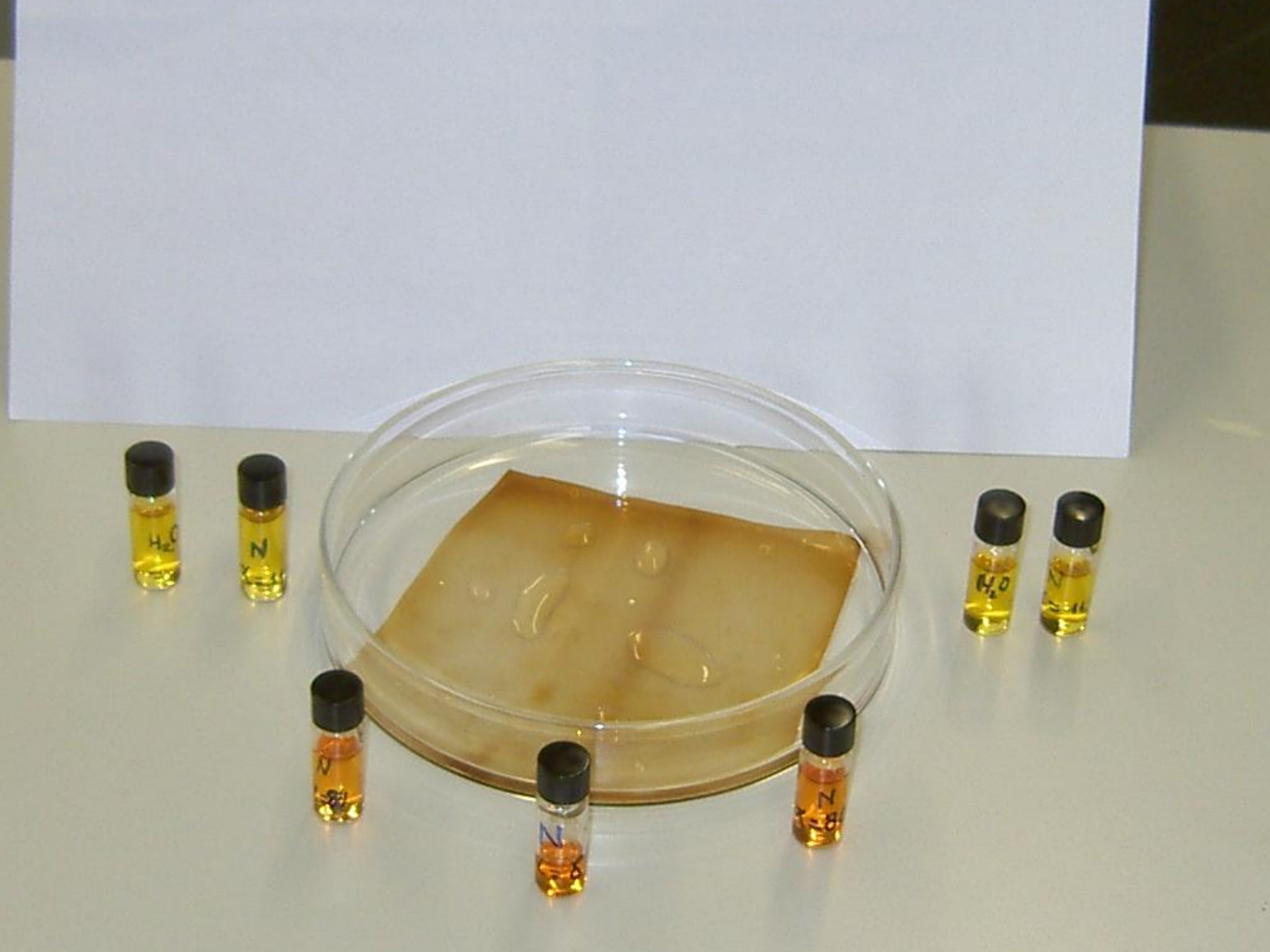


N
N
X=30
N
X=130
H2O
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X=1


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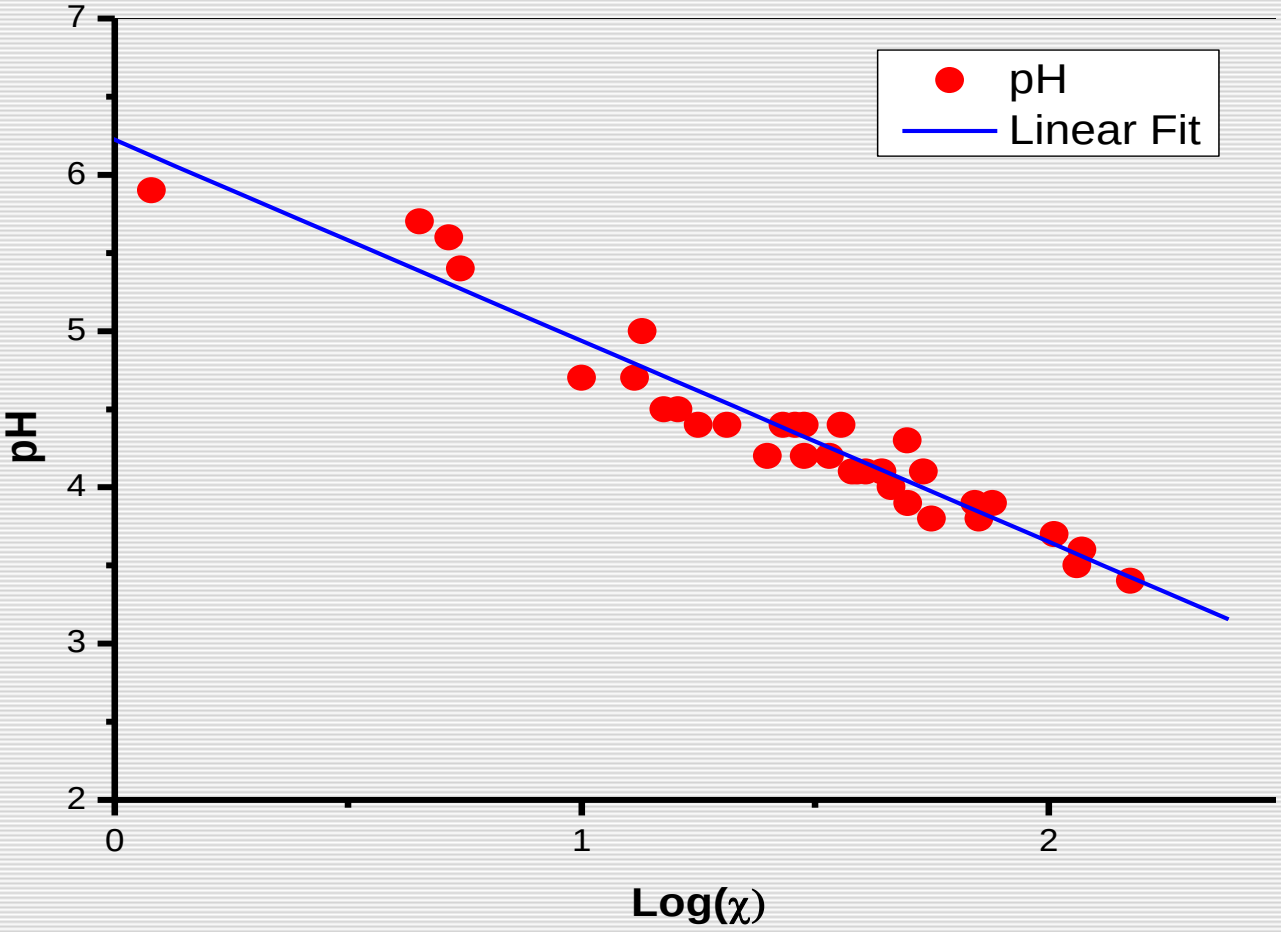

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Titrations:

- *Conductometric*
- *pHmetric*
- *Calorimetric*

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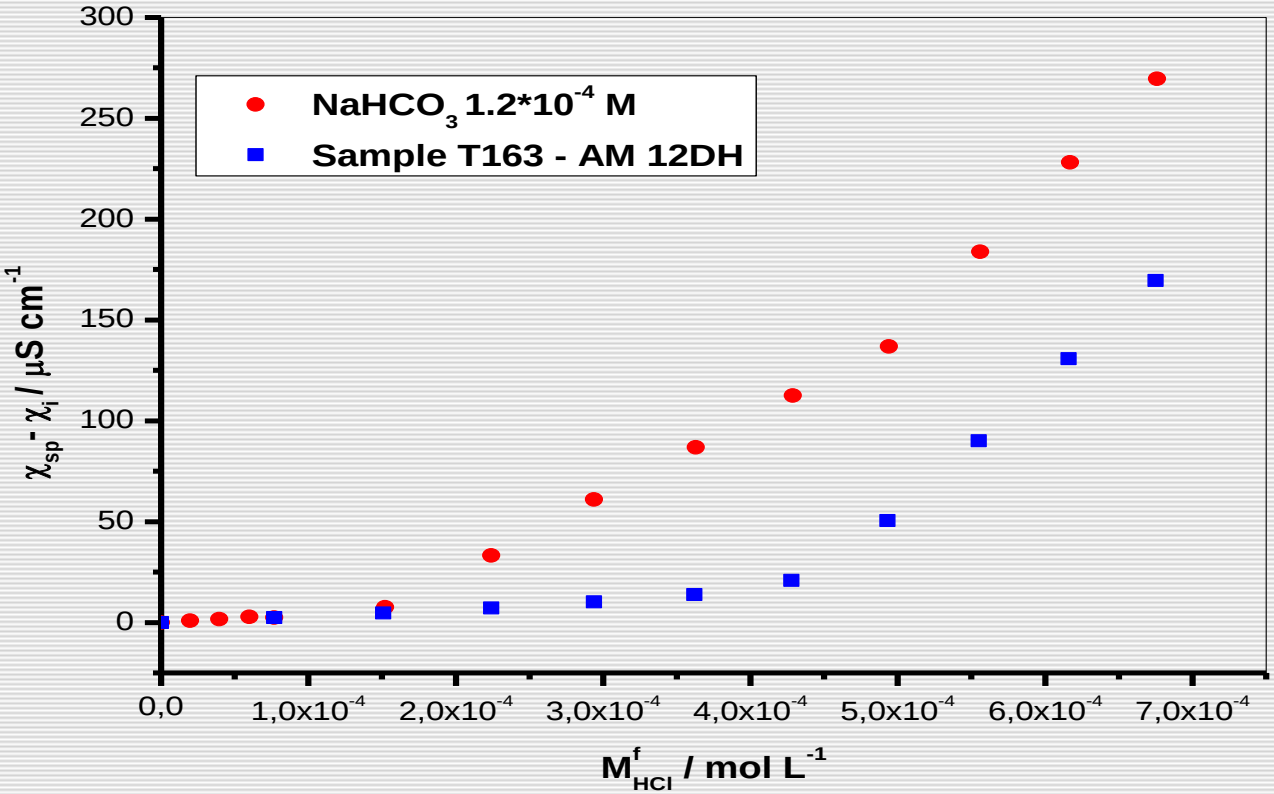
Conductometric Titration with HCl as titrant



C.M.Cacace, L.Elia, V.Elia, E. Napoli, M.Niccoli
Journal Molecular Liquids, 2009, 146, 122-126

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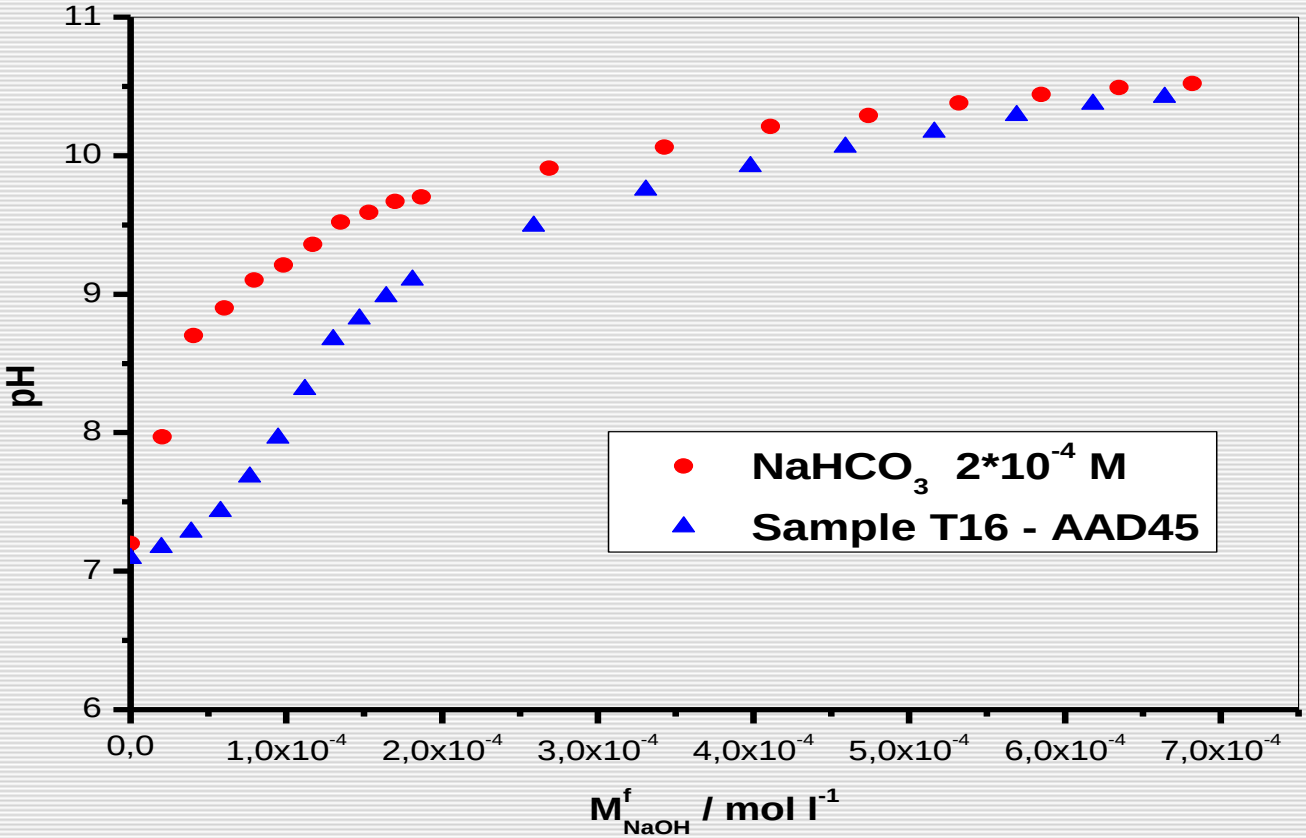
pHmetric Titration with NaOH as titrant



V.Elia, E. Napoli, M. Niccoli

Journal of Molecular Liquids, 2009 , Vol 149, 45-50

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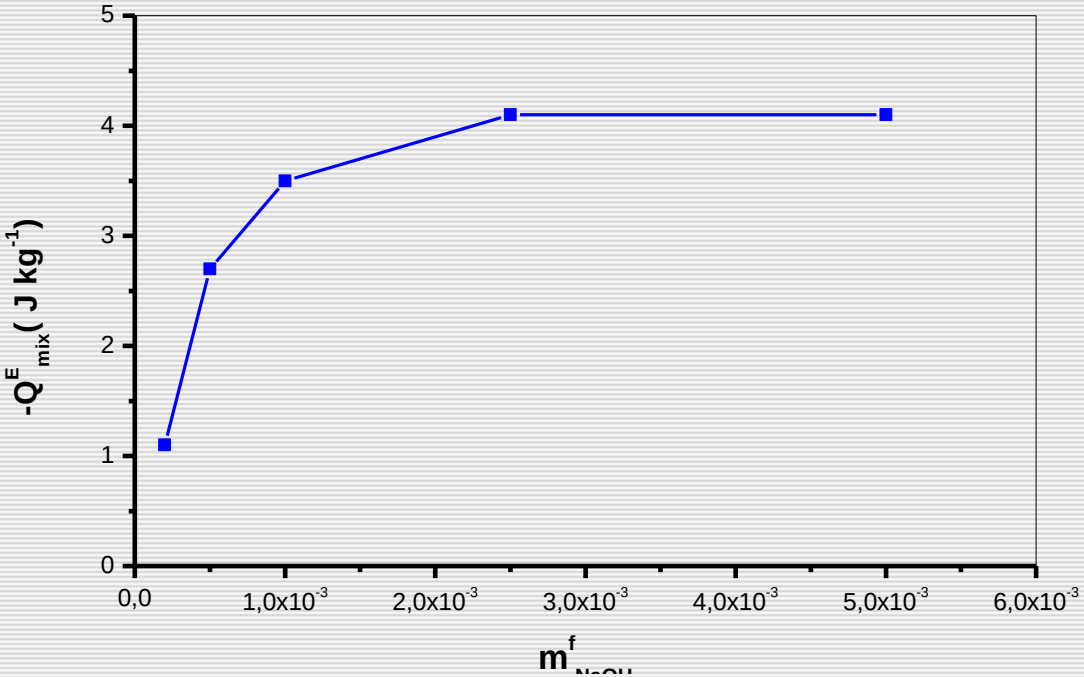
Calorimetric Titration with NaOH as titrant



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Journal of Solution chemistry, 2005 Vol.34 (8)

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Thermodynamic parameters for the association between DS and OH ions at 298 K

System	K' Kg mol^{-1}	-ΔH° kJ mol^{-1}	-ΔG°' kJ mol^{-1}	-ΔG°' kJ mol^{-1}	TΔS°' kJ mol^{-1}	M_{DS} *10^4 mol L^{-1}	M_{Na+}*10^4 mol L^{-1}
Tmix1	2612±1170	188±32	19±1	19±1	-168±33	1,2	1,6
Tmix2	1876±615	80±18	18.8±0.8	18.8±0.8	-61±19	3,0	1,7
Mix3	1986±519	184±25	18.8±0.7	18.8±0.7	-165±26	2,0	3,1
Mix122	8977±877	70±2	22.6±0.2	22.6±0.2	-47±2	2,8	7,1

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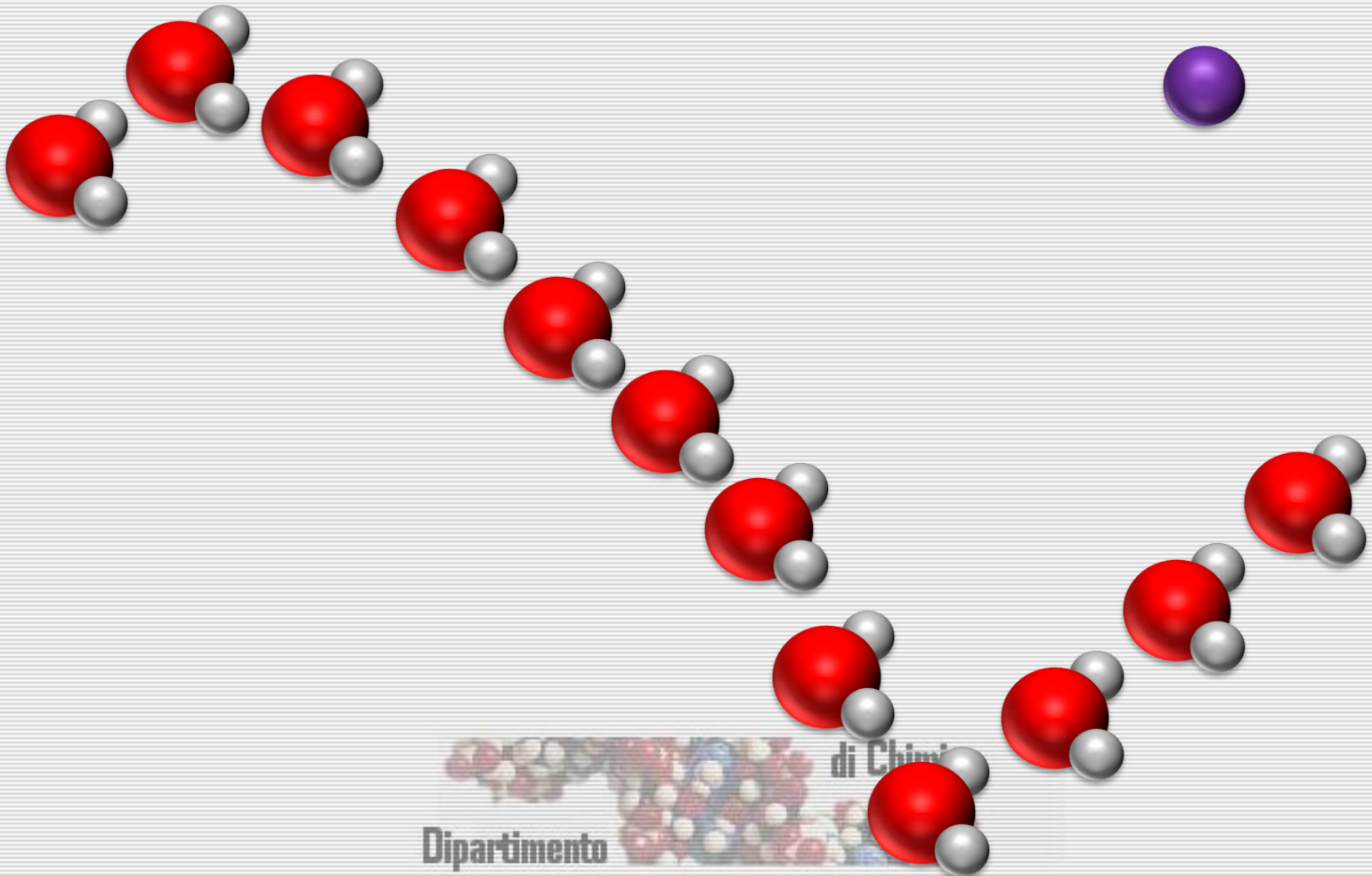

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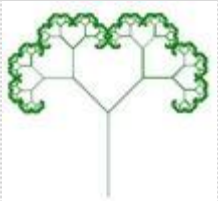
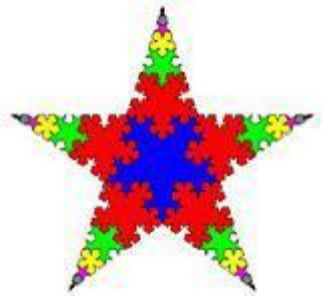


DISSIPATIVE STRUCTURES



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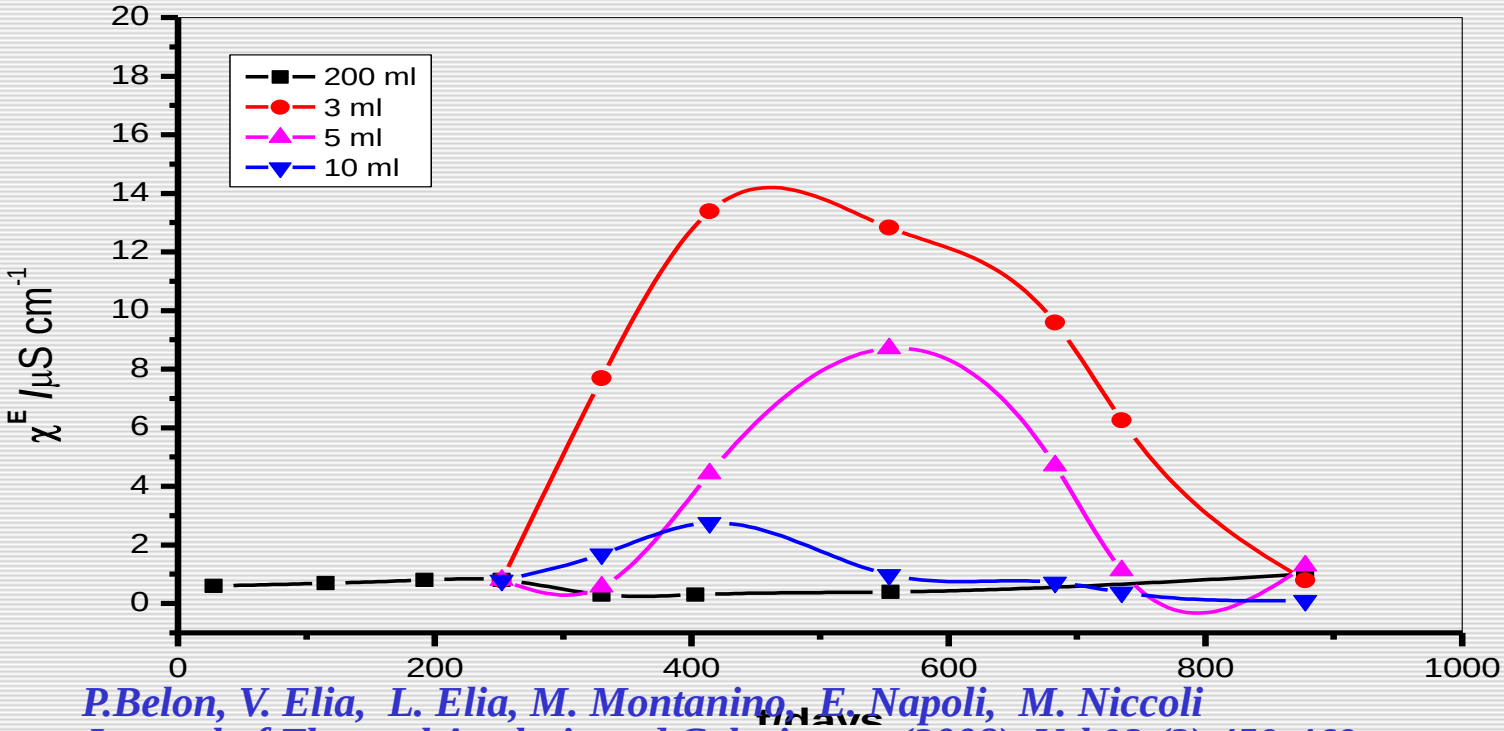
Combined Volume – Time Effect



P.Belon, V. Elia, L. Elia, M. Montanino, F. Napoli, M. Niccoli
Journal of Thermal Analysis and Calorimetry,(2008), Vol.93 (2),459-469

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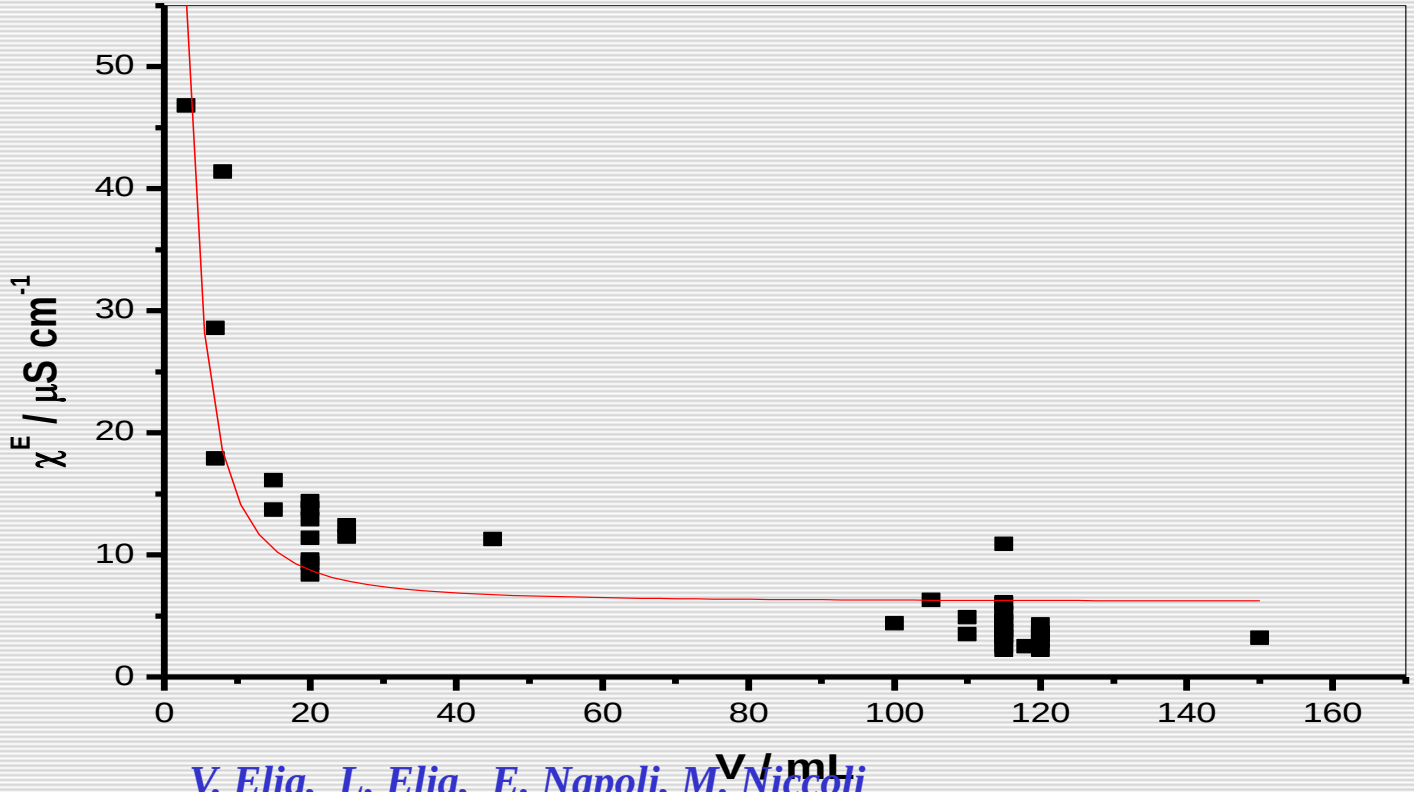
Excess Specific Electric Conductivity vs. Volume



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"International Journal of Ecodynamics, Vol.1 No.4 (2007)

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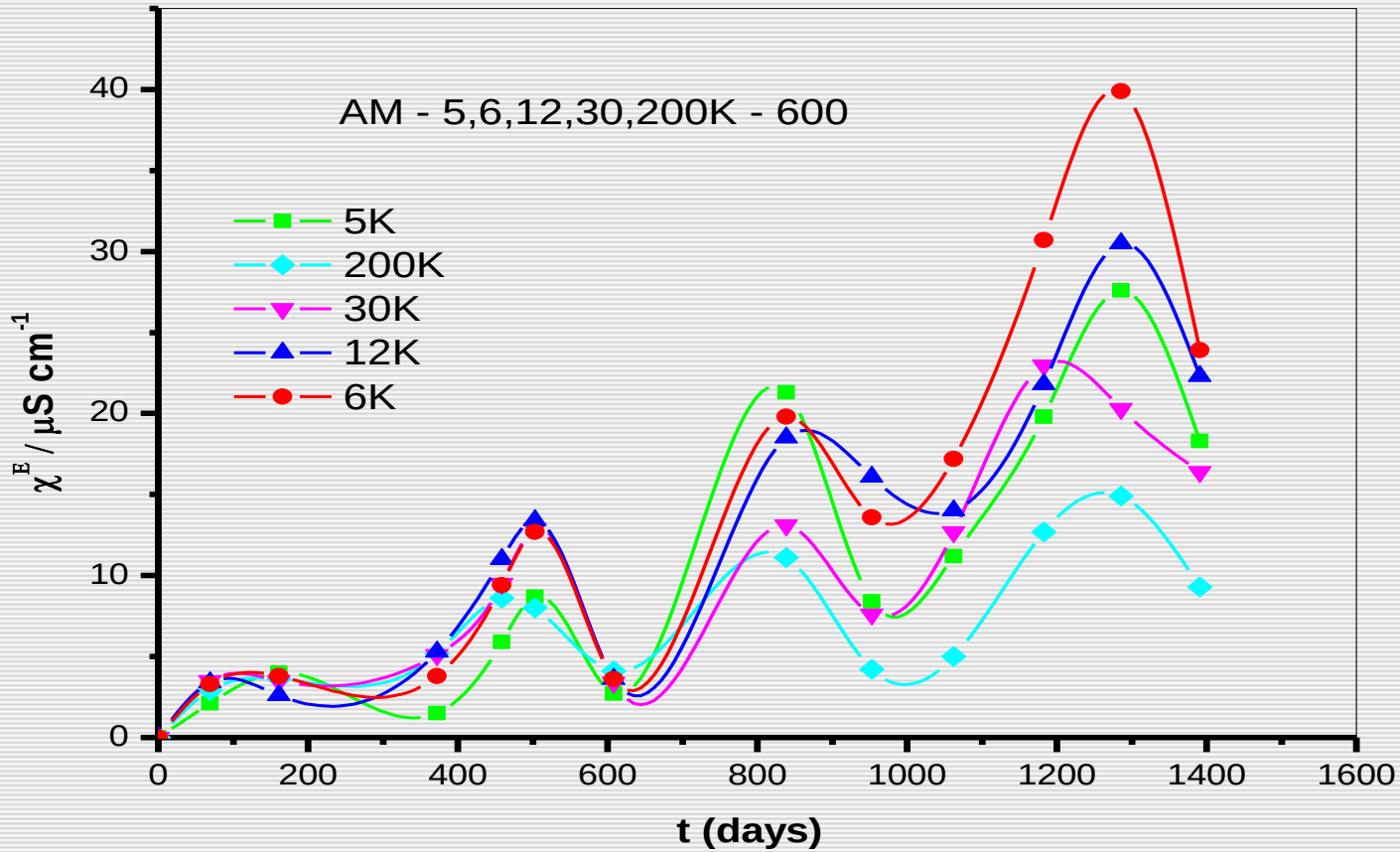
Excess Conductivity vs time of AM 5,6,12,30,200CK



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Journal of Thermal Analysis and Calorimetry, 2008, Vol. 93 (3), 1003

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The Effect of Filtration Procedures on the Sovramolecular Structure of Water

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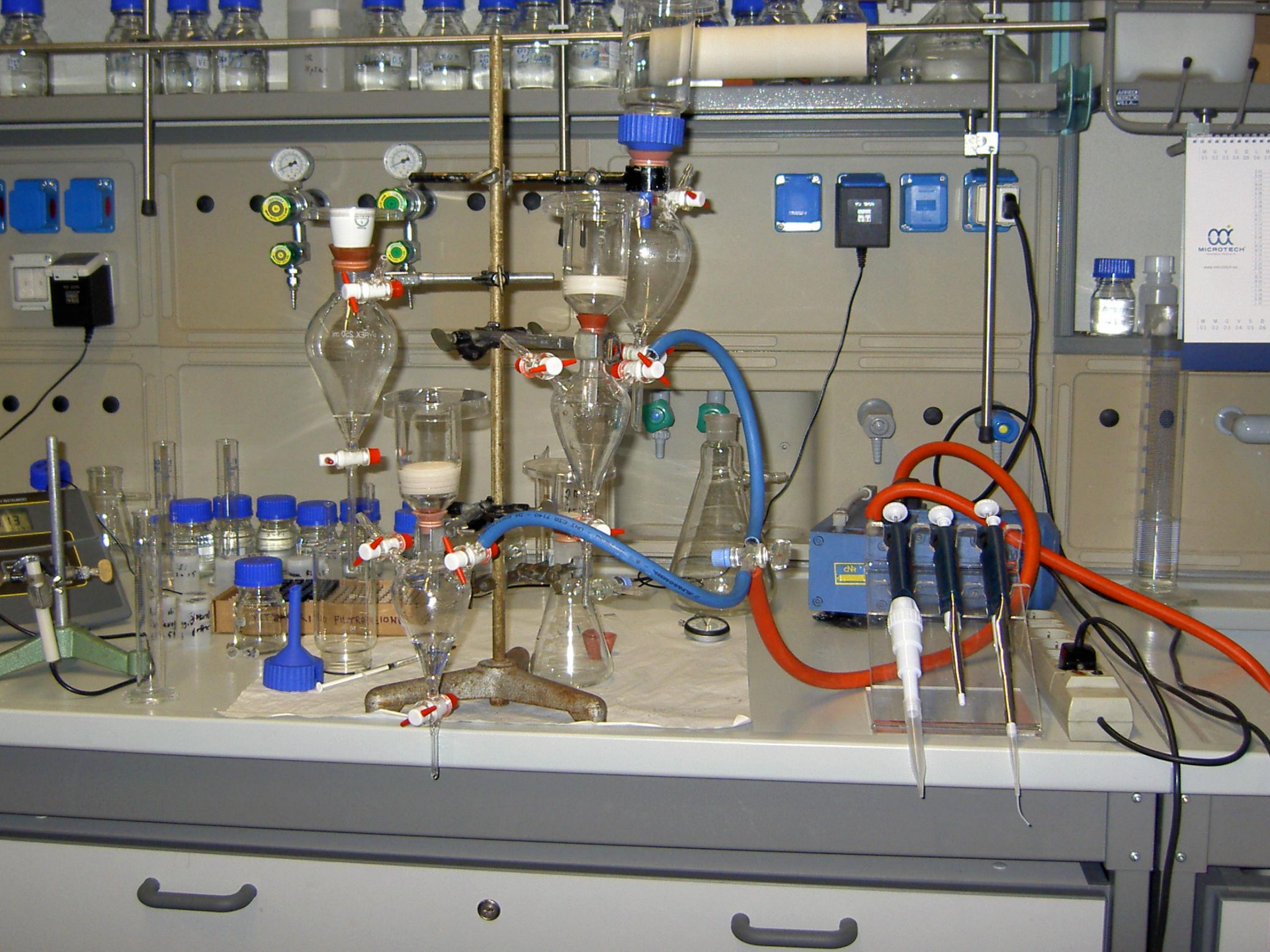
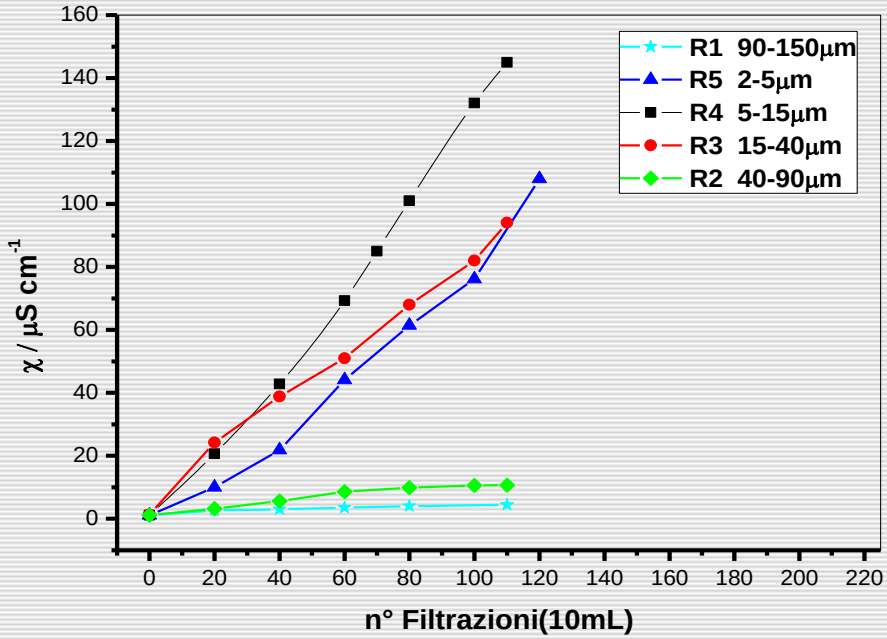
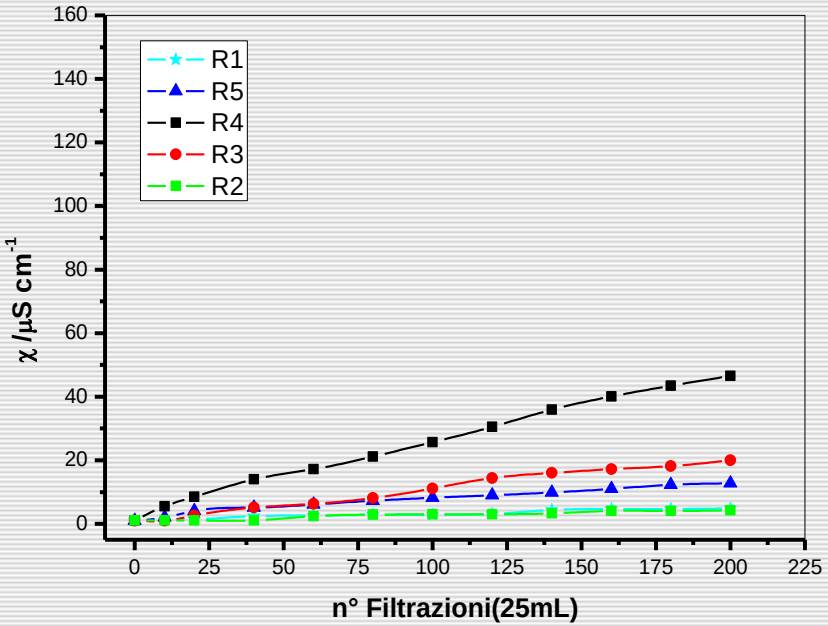

MICROTECH





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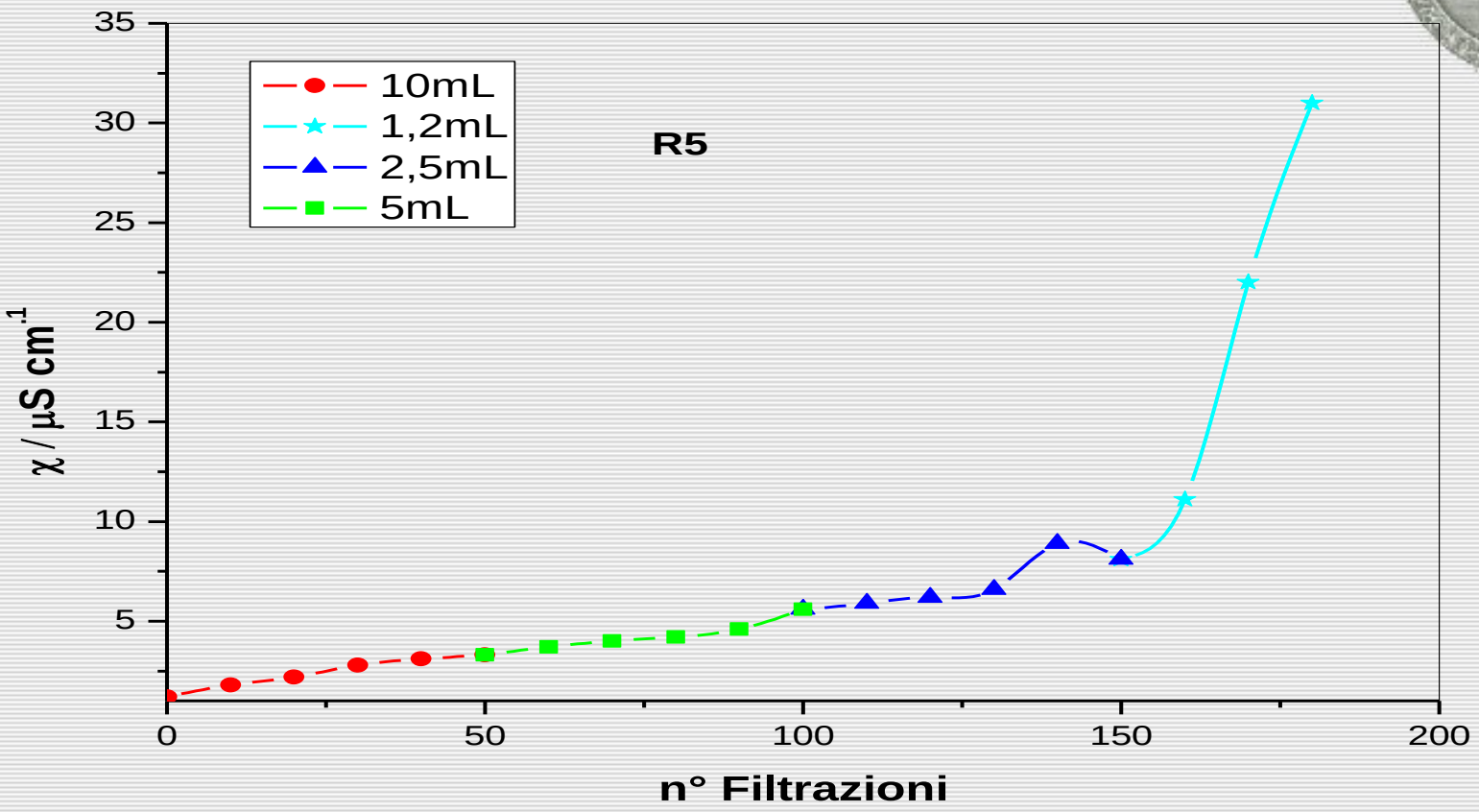

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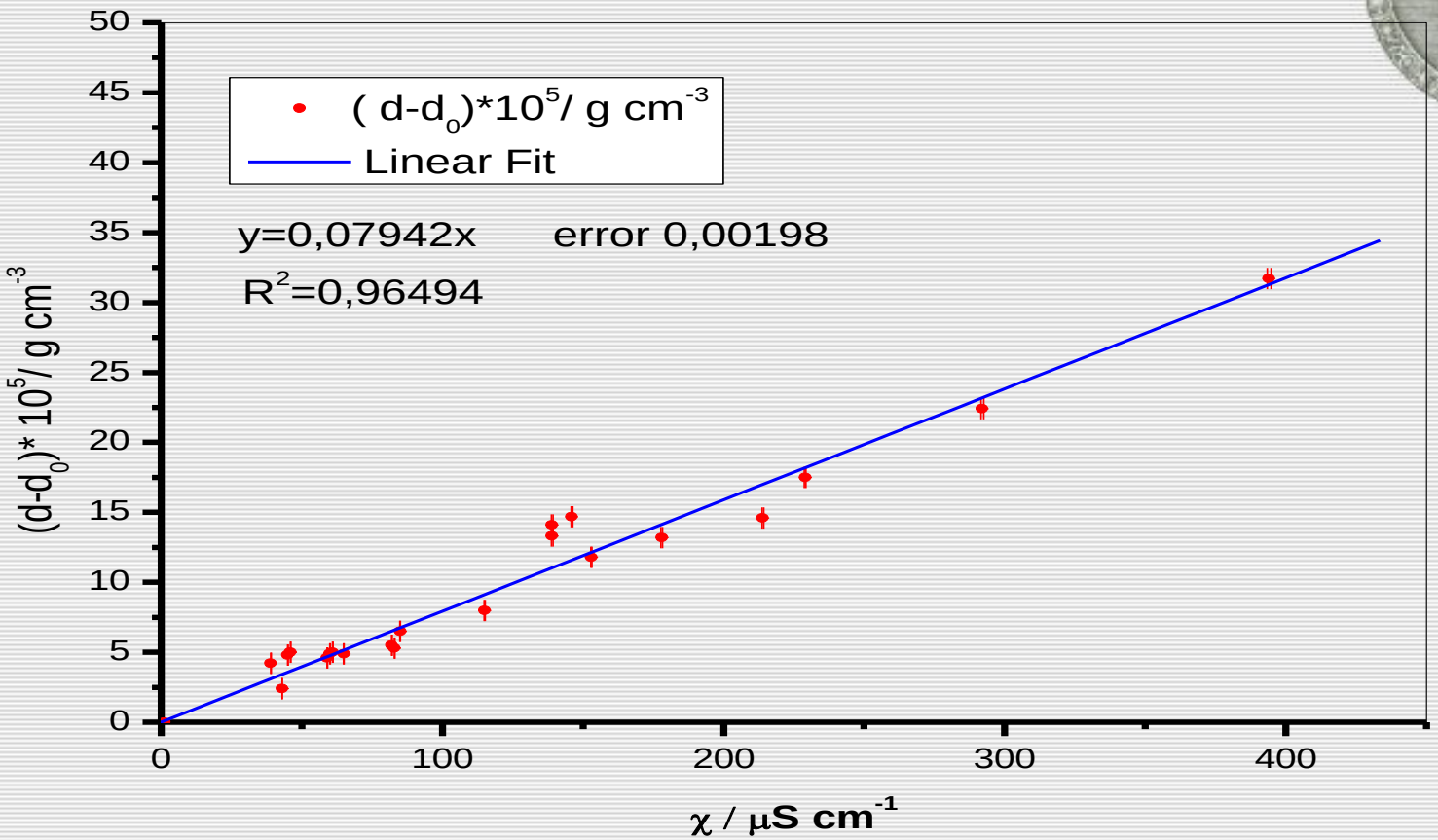

Fig.8 - Density vs Specific Electrical Conductivity (See Table 8)

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Quando la scienza si arrocca su un certo paradigma, escludendo come pazzo o eretico chi lo contesta, si comporta in modo dogmatico.

Come la mettiamo col fatto che l'innovazione avviene proprio quando qualcuno riesce a mettere in questione il paradigma dominante?

Umberto Eco

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"If we knew what it was we were doing, it would not be called research, would it?"

A. Einstein

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Thank you for your attention

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