

| Curso Aplicaciones de Resonancias Magnéticas |  |  |  | III Taller de Resonancia Magnética |                                   |   |
|--|--|--|--|------------------------------------|-----------------------------------|---|
| Hora   | LUN 28/3   | MAR 29/3   | MIE 30/3   | Hora                               | JUE 31/3                          | VIE 1/4   |
| 9-13   | <ul style="list-style-type: none"> <li>• Conceptos Generales de Resonancia Magnética (R. Gil).</li> <li>• RMN de Moléculas Orgánicas en Solución (R. Misico, M. García, R. Gil)</li> </ul> | <ul style="list-style-type: none"> <li>• RMN de alta resolución en sólidos para espines ½ (G. Monti)</li> <li>• RMN en la caracterización de sistemas porosos (R. Acosta)</li> </ul> | <ul style="list-style-type: none"> <li>• EPR en Metaloproteínas (C. Brondino)</li> <li>• Site Directed Spin Labeling en proteínas y péptidos (A. Costa Filho)</li> <li>• EPR en estudio de Radicales libres. Stress oxidativo. (S. Puntarulo)</li> <li>• Resonancia Ferromagnética (A. Butera)</li> </ul>                    | 9:00-9:30                          | inscripción                       | CP5: <b>A.Vila</b>                                |
|  |  |  |  | 9:30-9:40                          | apertura                          |   |
|  |  |  |  | 9:40-10:20                         | CP1: <b>C. Griesinger</b>         | CP6: <b>S. Puntarulo</b>                          |
|  |  |  |  | 10:20-10:40                        | CO1 M. Garcia                     | CO7 E. Winkler                                    |
|  |  |  |  | 10:40-11:10                        | <b>Café</b>                       |   |
|  |  |  |  | 11:10-11:50                        | CP2: <b>A. Costa Filho</b>        | <b>Orales cortas de estudiantes (4 de 10'+5')</b> |
|  |  |  |  | 11:50-12.10                        | CO2: P. Gonzalez                  |   |
|  |  |  |  | 12:10-12:30                        | CO3: S. Pellegrinet               | CO8: M. Riveira                                   |
|  |  |  |  | 12:30-14.00                        | <b>Almuerzo</b>                   |   |
| 13-15  | <b>Almuerzo</b>  |  |  |                                    |                                   |   |
| 15-18  | <ul style="list-style-type: none"> <li>• RMN de Biomoléculas en Solucion (R.Rasia)</li> </ul>  | <ul style="list-style-type: none"> <li>• Clase introductoria EPR. (A. Gennaro)</li> <li>• EPR: anisotropías y efectos dinámicos (A. Rizzi)</li> </ul>                                | <b>Sesiones en paralelo:</b> <ul style="list-style-type: none"> <li>• EPR: TP en laboratorio (N. Neuman, P. González)</li> <li>• RMN: <ul style="list-style-type: none"> <li>- RMN en medios anisotrópicos: análisis estructural de Biomoléculas y Moléculas Orgánicas en solución (R. Rasia, R. Gil)</li> </ul> </li> </ul> | 14:00-14:40                        | CP3: <b>B. Luy</b>                | CP7: <b>R. Kopke Salinas</b>                      |
|  |  |  |  | 14:40-15:00                        | CO4: S. Signorella                | CO9: R. Misico                                    |
|  |  |  |  | 15:00-15:30                        | <b>Café</b>                       |   |
|  |  |  |  | 15:30-16:10                        | CP4: <b>E. Ribeiro de Azevedo</b> | CP8: <b>A. Binolfi</b>                            |
|  |  |  |  | 16:10-16:30                        | CO5: F. Vaca Chávez               | CO10: G. Moyna                                    |
|  |  |  |  | 16:30-16:50                        | CO6 N. Neuman                     | <b>Conferencia Bruker: M. Chaykovsky</b>          |
|  |  |  |  | 16:50-17:10                        | <b>café + Posters</b>             | <b>café</b>                                       |
|  |  |  |  | 17:10-17:40                        |                                   | <b>Charla SNRM: G. Alberto – G. Mayada F.</b>     |
|  |  |  |  | 17:40-18:00                        |                                   | <b>Mesa Redonda</b>                               |
|  |  |  |  | 18:00-                             |                                   | <b>Clausura</b>                                   |
|  |  |  |  | 19:00                              | Visita Cervecería Santa Fe / cena |   |

| Curso Operadores de equipos de RMN |  |   |   | III Taller de Resonancia Magnética |                                   |   |
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| 9-13                               | <ul style="list-style-type: none"> <li>• Conceptos Generales de Resonancia Magnética (R. Gil).</li> <li>• RMN de Moléculas Orgánicas en Solución (R. Misico, M. García, R. Gil)</li> </ul> | <ul style="list-style-type: none"> <li>• RMN de alta resolución en sólidos para espines ½ (G. Monti)</li> <li>• RMN en la caracterización de sistemas porosos (R. Acosta)</li> </ul>            | <ul style="list-style-type: none"> <li>• Introducción básica para adquisición y procesamiento de espectros de RMN: Descripción del menú principal del Topspin. Comandos y tablas importantes. Adquisición y procesamiento de los datos, etc. (R.Gil, S. Tindiglia, P. Duché)</li> </ul> | 9:00-9:30                          | inscripción                       | CP5: <b>A.Vila</b>                                |
|                                    |  |   |   | 9:30-9:40                          | apertura                          |   |
|                                    |  |   |   | 9:40-10:20                         | CP1: <b>C. Griesinger</b>         | CP6: <b>S. Puntarulo</b>                          |
|                                    |  |   |   | 10:20-10:40                        | CO1: M. Garcia                    | CO7 E. Winkler                                    |
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|                                    |  |   |   | 11:10-11:50                        | CP2: <b>A. Costa Filho</b>        | <b>Orales cortas de estudiantes (4 de 10'+5')</b> |
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|                                    |  |   |   | 12:10-12:30                        | CO3: S. Pellegrinet               | CO8: M. Riveira                                   |
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| 13-15                              | <b>Almuerzo</b>  |   |   |                                    |                                   |   |
| 15-18                              | <ul style="list-style-type: none"> <li>• RMN de Biomoléculas en Solucion (R. Rasia)</li> </ul>   | <ul style="list-style-type: none"> <li>• Descripción del equipo de RMN: Descripción del sistema, mantenimiento y calibración del espectrómetro, etc. (R.Gil, S. Tindiglia, P. Duché)</li> </ul> | <ul style="list-style-type: none"> <li>• Guía básica para utilizar Topspin, NMR guide, Plot Editor y ICON. (R.Gil, S. Tindiglia, P. Duché)</li> </ul>   | 14:00-14:40                        | CP3: <b>B. Luy</b>                | CP7: <b>R. Kopke Salinas</b>                      |
|                                    |  |   |   | 14:40-15:00                        | CO4: S. Signorella                | CO9: R. Misico                                    |
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|                                    |  |   |   | 16:50-17:10                        | <b>café + Posters</b>             | <b>cafe</b>                                       |
|                                    |  |   |   | 17:10-17:40                        |                                   | <b>Charla SNRM: G. Alberto – G. Mayada F</b>      |
|                                    |  |   |   | 17:40-18:00                        |                                   | <b>Mesa Redonda</b>                               |
|                                    |  |   |   | 18:00-                             |                                   | <b>Clausura</b>                                   |
|                                    |  |   |   | 19:00                              | Visita Cervecería Santa Fe / cena |   |

## Titulos de charlas:

### Conferencias Plenarias (35' +5')

- CP1- C. Griesinger: "NMR to solve questions of structural chemistry and biology as well as medicine"
- CP2- A. Costa Filho: "Better alone than in bad company" – An unpaired spin dance in a party of biomolecules"
- CP3- B. Luy: "Fast experiments and configurational analysis: novel developments in small molecule NMR spectroscopy"
- CP4- E. Ribeiro de Azevedo: "Solid-State NMR on Plant Cell Walls"
- CP5- A. Vila: "Alternative Ground States in Electron Transfer Copper Proteins Probed by EPR and NMR Spectroscopies"
- CP6- S. Puntarulo: "Free Radicals in Biological Systems: Detection by Electron Paramagnetic Resonance (EPR)"
- CP7- R. Kopke Salinas: "NMR studies of protein subunits of a bacterial killing type IV secretion system"
- CP8- A. Binolfi: "High-resolution in-cell magnetic resonance studies of the protein alpha-synuclein inside mammalian cells"

### Comunicaciones Orales (15'+5'):

- CO1- M. García: "Structural Analysis of small organic molecules by residual dipolar couplings (RDC) using "pure-shift" experiments"
- CO2- P. Gonzalez: "CW- and pulsed-EPR studies on the chlorite dismutase from *Magnetospirillum* sp"
- CO3- S. Pellegrinet: "Use of derivatives of mandelic acid to determine the optical purity and absolute configuration of cyclohexenols by NMR"
- CO4- S. Signorella: "Unraveling the catalytic cycle of redox reactions mediated by metal-based biomimetic complexes through EPR and NMR spectroscopy".
- CO5- F. Vaca Chávez: "NMR as a tool in the study of ionic liquids"
- CO6- N. Neuman: "Anisotropic magnetic interactions in transition metal clusters"
- CO7- E. Winkler: "Magnetic nanoparticles: internal structure from Electron Magnetic Resonance"
- CO8- M. Riveira: "NMR in anisotropic media in the identification of new domino reactions"
- CO9- R. Misico: "Impact of NMR from academia to industry"
- CO10- G. Moyna- "From metabolomics to isotope effects on nuclear shielding: NMR spectroscopy meets the Uruguayan countryside"

### Comunicaciones Orales Cortas (10'+5')

- COC1- G. Bottini: "Study of interionic hydrogen bonds in ionic liquids through determination of H/D isotope effects on nuclear shielding"
- COC2- F. Campise: "Macromolecular structure: average molecular weight between crosslinks of dry polymer networks by NMR"
- COC3- M. S. Islas: "Preparation of aliskiren copper(II) complex and solution studies by EPR and UVvis spectroscopies"
- COC4- M. C. Miotto: "NMR structural characterization of the complexation of Cu(I) by acetylated alpha-Synuclein"

**Conferencia Bruker** - M. Chaykovsky: "Driving Innovation of Magnetic Resonance".

**Charla SNRM** - Gustavo Alberto - Gastón Mayada F.: "Sistema de Gestión de Turnos SNRM: Implementación y avances".