



Programa Provisório

Módulo 1: Cristalização

Nov. 13 - Domingo

17 - 19h **Inscrições**

19 - 20h **Cerimônia de Abertura**

20 - 21h **Conferência:** *The history of the Crystallography in Brazil*
Profa. Dr. Yvonne P. Mascarenhas (USP -Brasil)

21h30 **Coquetel**

Nov. 14 - Segunda-feira

9 - 11h **Curso:** *The wonderful world of crystals. An introduction to the concept of crystal, crystal structures and their applications*
Prof. Dr. Juan Manuel Garcia Ruiz (Institucion CSIC-Univ. de Granada-Espanha)

11 - 11h30 **Coffee Break**

11h30 -13h **Curso:** *Introduction to nucleation theory. Understanding how crystals start to form.*
Prof. Dr. Juan Manuel Garcia Ruiz (Institucion CSIC-Univ. de Granada-Espanha)

13h30 **Almoço**

17 - 18h30 **Palestra convidada:** *Crystal growth of heavy metal iodides for radiation detectors: from bulk and layers to nanostructures*
Prof. Dr. Laura Fornaro (Universidad Centro de Región Este - Uruguai)



18h30 - 20h	Palestra convidada: <i>Crystallization methods in nanomaterials</i> Prof. Dr. Antonio Carlos Hernandez (USP-Brasil)
-------------	---

20 - 22h	Jantar
----------	---------------

22 - 23h	Atividades Culturais
----------	-----------------------------

Nov. 15 - Terça-feira

9 - 11h	Curso: <i>Crystal Growth Mechanisms, Growth kinetics and Crystal morphology. An introduction to how the crystals actually grow.</i> Prof. Dr. Juan Manuel Garcia Ruiz (Institucion CSIC-Univ. de Granada-Espanha)
---------	---

11 - 11h30	Coffee Break
------------	---------------------

11h30 - 13h	Curso: <i>The routes to crystals for structural studies. I) Solution Techniques. Hands-on demonstrations.</i> Prof. Dr. Juan Manuel Garcia Ruiz (Institucion CSIC-Univ. de Granada-Espanha)
-------------	---

13h30	Almoço
-------	---------------

17 - 18h30	Palestra convidada: <i>Industrial applications in Active Pharmaceutical Ingredients (APIs) crystallization.</i> Dr. Dora Tombari (GADOR - Argentina)
------------	--

18h30 - 20h	Palestras convidadas
-------------	-----------------------------

20 - 22h	Jantar
----------	---------------

22 - 23h	Atividades Culturais
----------	-----------------------------



Nov. 16 - Quarta-feira

9 - 11h **Curso:** *The routes to crystals for structural studies. II) Crystal growth from gel, microfluidics and microgravity. Hands-on demonstrations.*

Prof. Dr. Juan Manuel Garcia Ruiz (Institucion CSIC-Univ. de Granada-Spain)

11 - 11h30 **Coffee Break**

11h30 - 13h **Curso:** *The routes to crystals for structural studies: III) Crystal growth from melt; IV) Crystal growth from vapor, hydrothermal growth and other crystallization techniques.*

Prof. Dr. Juan Manuel Garcia Ruiz (Institucion CSIC-Univ. de Granada-Spain)

13h30 **Almoço**

17 - 20h **Mesa redonda:** *Challenge and developments of crystallization process in Pharmaceutical Area*

Participation ANVISA (Health Brazilian Agency), Funding Brazilian Agencies, Pharm. Labs etc.

20 - 22h **Jantar**

22 - 23h **Atividades Culturais**

Nov. 17 - Quinta-feira

9 - 11h **Curso:** *The routes to crystals for structural studies: V) Protein crystallization. Theory and techniques. Hands-on demonstrations*

Prof. Dr. Juan Manuel Garcia Ruiz (Institucion CSIC-Univ. de Granada-Spain)

11 - 11h30 **Coffee Break**

11h30 - 13h **Curso:** *Handling crystals and analysis of the results of hands-on demonstration.*

Prof. Dr. Juan Manuel Garcia Ruiz (Institucion CSIC-Univ. de Granada-Spain)

13h30 **Almoço**



17 - 18h30 **Palestra convidada:** *New perspectives for HT-UV biomolecular crystallization at the LNBio/CNPEM.*

Prof. Dr Iris Torriani (LNLS - UNICAMP-Brasil)

18h30 - 20h **Documentário:** *The Mystery of the Giant Crystals* (<http://vimeo.com/17007809>)

Prof. Dr. Juan Manuel Garcia Ruiz (Institucion CSIC-Univ. de Granada-Spain)

20 - 22h **Jantar**

22 - 23h **Atividades Culturais**

Nov. 18 - Sexta-feira

9 - 11h **Mini Curso:** *Understanding and Rationalizing Cocrystal Discovery, Solubility, and Selection. 1) Principles that guide cocrystal formation and thermodynamic stability.*

Prof. Naír Rodríguez Hornedo (University of Michigan)

11 - 11h30 **Coffee Break**

11h30 - 12h30 **Mini Curso:** *Understanding and Rationalizing Cocrystal Discovery, Solubility, and Selection. 2) Strategies to fine-tune cocrystal solution behavior*

Prof. Naír Rodríguez Hornedo (University of Michigan)

13h30 **Almoço**

17 - 20h **Mini Curso:** *Understanding and Rationalizing Cocrystal Discovery, Solubility, and Selection. 3) Critical indicators to streamline cocrystal discovery and selection without the time and material consuming requirements of traditional methods*

Prof. Naír Rodríguez Hornedo (University of Michigan)

20h **Cerimônia de encerramento**

21 - 22h **Jantar**