

Romanian Action for Integrating, Networking and Strengthening the ERA RAINS

Project coordinator: Bogdan C. SIMIONESCU

ACADEMIA ROMANA



Institutul de Chimie Macromoleculara



"PETRU PONI"

Aleea Grigore Ghica Voda, nr. 41A 700487 Iasi, Romania Tel.: 0232-217454; *260332, *260333, *260334 Fax: 0232-211299; e-mail: ppont@icmop.ro





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Objectives addressed

Strategic objectives: Reinforcement of the Associated Candidate Countries' Research Capacities: reinforcement of the research capacity of Romania (one of the target associate candidate countries). More specifically, RAINS is aimed to consolidate the research potential of an outstanding Romanian research centre the "Petru Poni" Institute of Macromolecular Chemistry (PPIMC) in the 3 NMP area of 6th FP through:

✓ enhancing the participation of PPIMC and its Romanian partners in the 6th Framework Programme;

✓ diminishing "brain drain" phenomena by increasing job opportunities and offering better carrier opportunities.

Thematic area: Knowledge-based multifunctional materials

Thematic strategic objective: Development of fundamental knowledge (to understand complex physico-chemical and biological phenomena relevant to the mastering and processing of intelligent materials with the help of experimental, theoretical and modelling tools).

RAINS Objectives

✓ to adapt the research potential of the institute to wider societal and economic needs both at regional/national and European levels

 \checkmark to strengthen the cooperation with regional/national and European partners

 \checkmark to increase the competitiveness and participation of PPIMC in 6th FP projects

✓ to disseminate information and to facilitate communication between various scientific, educational and industrial bodies in view of full integration into the ERA

✓ to increase the attractiveness of the research careers for young people and to reduce the 'brain drain'

✓ to promote full integration of women into the socio-professional environment.



Specific and measurable objectives

International Evaluation and Development Strategy of PPIMC

Re-define the profile of PPIMC through independent analysis/evaluation and internal analysis in order to achieve wider recognition at both national and international levels from the analysis/evaluation process

> Agree on a coherent strategy for the long-term development of the institute and subsequent full integration into ERA by implementing new ideas and recommendations issued

PPIMC Research Integration and Networking

Increase the participation of PPIMC in European and international R&D programs

Enlarge and strengthen the already existing PPIMC Cooperation Network at national and international levels

 \succ Support the integration of local/national traditional and new partners of PPIMC in view of EU enlargement

Improving PPIMC Research Capacity

Strengthen centre capacity for top level research through inhouse and external training programmes and by upgrading /renewing the S&T research equipment

Increase the attractiveness of research careers for young scientists including PhD students by designing new curricula and increasing job opportunities

Modernising the administrative structure and working environment within PPIMC

> Define and implement a modern organization/management system for PPIMC as a key action for the future development of the Centre by creating three new support offices

Improve the working and living conditions of PhD students and young scientists in an attempt to reduce the 'brain drain'

Dissemination of project results

Promote the achievements under the RAINS Project through website, conferences, workshops and media coverage

Strengthen the connection with business media in order to increase the RTD potential of the NE Romanian Region and of the country

Share the knowledge and skills acquired including the use of new equipment with regional partners

Improve the perception of general public towards science and chemistry by organizing 'Open Days', publishing articles dedicated to the general public, media interviews

> Increase awareness of women on their socio-professional role and on the opportunities offered by FP6.

WORK PACKAGES

WP1. Evaluation and development strategy for PPIMC

WP2. PPIMC research integration and networking

WP3. Improving PPIMC research capacity

WP4. Modernising the administrative structure and working environment of PPIMC

WP5. Dissemination of project results

WP6. Project management

RAINS resources

PPIMC: the personnel (a total of 89 person-months, including project management) and the entire S&T infrastructure RAINS budget for specific support activities PPIMC National/International Network

PPIMC: Resources and expertise

PPIMC: founded in 1949 as an institute of the Romanian Academy; located in Iasi, historical capital of the NE Region of Romania

PPIMC: an *Institute of Excellence of the Romanian Academy*, ranked in the first/second position among the 64 institutes/centres of the Romanian Academy

PPIMC: listed by the reputed Institute for Scientific Information (ISI), Philadelphia, USA, among the "main Romanian actors on the international scientific scene"

PPIMC innovation competences

scientific competence, reflected in publications in macromolecular and organic chemistry, biochemistry, physical chemistry, biology, physics and materials science

✓ *technological* competence dedicated to technology transfer and industrial implementation of the original research.

Scientific expertise/excellence:

New synthetic polymers (silicon-based monomers and polymers; functional polymers; heteroatomic monomers and polymers, thermally stable and flame resistant polymers; linear and non-linear polyelectrolytes; polyurethanes)

Chemical modification of natural polymers (cellulose and lignin modification; high added value polymeric materials issued from biomass)

- > Bioactive and biocompatible polymers
- Solution and solid state properties of multicomponent systems
- Environment protection and energy conservation

"Hot" topics:

✓ multicomponent and multifunctional polymeric systems based on natural and synthetic polymers

✓ thin films and nano-sized materials directed toward UV/laser ablation, optoelectronic and electro-optic devices, lithography or thermally resistant membranes

✓ multiresponsive polymeric materials that are either obtained by or used for eco-friendly processes

Project Management Structure Chart



Project Management

Management Team

Project Coordinator (PC) - Prof. Bogdan C. Simionescu (bcsimion@icmpp.ro)

Project Manager (PM) - Dr. Valeria Harabagiu (hvaleria@icmpp.ro)

Education and Training Manager (ETM) – Dr. Ecaterina Stela Dragan (sdragan@icmpp.ro)

Dissemination Manager (DM) – Dr. Gabrielle Charlotte Chitanu (chita@icmpp.ro)

Financial Manager (FM) - Raluca And one (ralucaandone@yahoo.com)

Steering Committee

An external body composed of local and national personalities with complementary background expertise and different connections to RTD, economic, health and environment related activities

International Advisory Board

Outstanding scientific personalities, possessing long term expertise in the organization and management of research