

# X-rays and Neutrons for a Sustainable Future - Advanced Materials, Climate Crisis, Human Health

Röntgen-Ångström International Summer School 2022 August 14 - 21, 2022 Varberg, Sweden http://www.raciri.org

### About RAC-2022 International Summer School and previous RACIRI Summer Schools

Germany, the Russian Federation and Sweden have jointly launched in 2013 the RACIRI Summer School initiative that is based on two bilateral cooperation platforms, the German-Swedish Röntgen-Ångström Cluster RAC (<a href="https://www.rontgen-angstrom.eu">www.rontgen-angstrom.eu</a>) and the German-Russian Ioffe-Röntgen Institute IRI (<a href="https://www.ioffe-roentgen.org">www.ioffe-roentgen.org</a>).

With the existing and upcoming top research facilities, the European X-ray Free Electron Laser (European XFEL) in Hamburg, the European Spallation Source ESS and the MAX IV Laboratory in Lund, PETRA III, the future PETRA IV synchrotron-radiation facility and the soft X-ray FEL FLASH at DESY, as well as the high-flux research reactor PIK in Gatchina near St. Petersburg, the Baltic region is significantly strengthening its analytical research capabilities over the next decade for users from all over the world. Added to this is the close cooperation with ILL and ESRF in Grenoble.

A key target of both platforms, RAC and IRI, is the training of the next generation of researchers in order to contribute to the best possible exploitation of this most-advanced research infrastructure.

However, due to the war in Ukraine since February 24, 2022, there can be no trilateral RACIRI Summer School in the year 2022. The Swedish and German co-organizers of RACIRI have decided - with regret to offer instead a Röntgen-Ångström International Summer School 2022 (RÅC-2022), without participants from institutions in the Russian Federation. This decision was unavoidable in view of the sanctions of the European Commission from March 4, 2022, to suspend cooperation with institutions of the Russian Federation on research and innovation.

The RÅC-2022 International Summer School offers (like previous RACIRI events) a unique training for the next generation of researchers in materials and life science, who utilize neutrons and X-rays. The general theme of the RACIRI Summer Schools is "Advanced Materials Design at X-ray and Neutron Facilities". Each annual summer school can choose its specific focal theme on topics of high current importance, like the focal theme of RÅC-2022:

#### "X-rays and Neutrons for a Sustainable Future - Advanced Materials, Climate Crisis, Human Health".

The RÅC-2022 International Summer School addresses master (diploma) students in their final research year, doctoral and PhD students, and young postdoctoral researchers, all predominantly from universities and research institutions of the partner countries. It is one of the main goals of RÅC-2022 to strengthen a broad scientific knowledge base of the next generation of researchers in advanced materials research and to contribute to the necessary interdisciplinary literacy in relevant scientific fields and disciplines. The program structure, the addressed topics and the lectures are designed to

improve a fundamental understanding rather than just focus on plain experimental methods and techniques. In addition, the summer school emphasizes a stimulating learning environment with sufficient time for social and cultural activities among the participants. Internationally renowned scientists and experts from the relevant fields will be invited as lecturers and tutors. Poster Sessions and a Science Slam are part of each RACIRI Summer School. At the end of each lecture day, the students are offered Tutorials, where they can meet and discuss with each lecturer of the day separately in a relaxed atmosphere. These program parts stimulate the interaction and a close dialogue between the generations.

## Participation and how to apply

In general, admission to the RÅC-2022 International Summer School is based on national calls in the partner countries Sweden and Germany, and will be granted through a nomination procedure based on scientific excellence. Each country will organize autonomously call and the nomination procedure and may engage for that purpose national research committees to rely on their experiences, networks and best practice mechanisms in advertising the RÅC-2022 International Summer School and in nominating young researchers.

The nominated young researchers will receive all necessary funding for travel, accommodation and full board.



# Röntgen-Ångström International Summer School 2022 Call for Application for Participants from <u>German</u> Institutions

# X-rays and Neutrons for a Sustainable Future: Advanced Materials, Climate Crisis, Human Health

Date: August 14-21, 2022

Venue: Varbergs Kusthotell, Varberg, Sweden (<u>www.varbergskusthotell.se</u>)

Link: www.raciri.org

The Röntgen-Ångström International Summer School 2022 offers up to **25 full scholarships** (travel, lodging, full board) for senior master students, doctoral and PhD students, and young postdoctoral researchers, who are residents of Germany and work or study at German research institutions or German universities.

#### Invited for application are:

- qualified senior master students in the final research phase of their study programs (master/diploma)
- PhD students with proven academic background and necessary qualifications
- young postdoctoral researchers

All applications will be evaluated by a committee, together with the 'Komitee Forschung mit Neutronen' (KFN) and the 'Komitee Forschung mit Synchrotronstrahlung' (KFS). The nomination of applicants will be based on their academic accomplishments, experience in research and education, as well as taking gender balance into account.

#### Applications have to include:

- a CV
- a one-page motivation letter explaining why she/he
  - o would like to participate
  - o how this might benefit his/her ongoing or planned research
- 2 brief recent reference letters

#### Deadline for application: May 31, 2022

- early application is highly recommended
- submission via email in a single pdf file to: raciri@desy.de

#### RÅC-2022 Organizers:

Deutsches Elektronen-Synchrotron (DESY); Swedish Research Council Vetenskapsrådet. RÅC International Summer School 2022 is embedded in the scientific cooperation framework of the Röntgen-Ångström-Cluster (RAC).

In Germany, the RÅC International Summer School 2022 is supported by the Federal Ministry of Education and Research (BMBF).

#### **Personal information:**