



## ***From Basic Science and Applications to Technologies inspired by Nature***

RACIRI 2018 SUMMER SCHOOL  
25. August – 1. September 2018  
Rügen Island, Cliff Hotel Rügen  
<http://www.raciri.org>

### **Call for Applications**

#### **The RACIRI Summer School**

Germany, Russia and Sweden have jointly launched the RACIRI Summer Schools initiative in 2013 that is based on two bilateral cooperation platforms, the German-Swedish Röntgen-Ångström Cluster RAC (<http://www.rontgen-angstrom.eu>) and the German-Russian Ioffe-Röntgen Institute IRI ([www.ioffe-roentgen.org](http://www.ioffe-roentgen.org)).

With the upcoming and existing top facilities, European X-ray Free Electron Laser (European XFEL) in Hamburg, the European Spallation Source ESS, the MAX IV Laboratory in Lund, the existing PETRA III and the future PETRA IV synchrotron-radiation facility at DESY as well as the high-flux research reactor PIK in Gatchina near St. Petersburg, the Baltic region will significantly strengthen its analytical research capabilities over the next decade that will also be accessible to users from other nations.

**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 unique research infrastructure.**

RACIRI Summer Schools offer a unique training for young researchers in materials and life science, who utilize neutrons and X-rays. Their **general theme** is ***“Advanced Materials Design at X-ray and Neutron Facilities”***. Each RACIRI Summer School chooses its own specific **focal theme**:

- RACIRI 2013, in Petergof (near St. Petersburg, Russia): *Soft Matter and Nano Composites*
- RACIRI 2014, in Stockholm, Sweden: *Imaging with X-rays and Neutrons in Life and Materials Sciences*
- RACIRI 2015, on Rügen Island, Germany: *Time-resolved and In-situ Studies of Materials: Basics and Applications*
- RACIRI 2016, in Repino (near St. Petersburg, Russia): *Convergent Science and Technology for Society*
- RACIRI 2017, in Ronneby and Lund, Sweden: *Grand Challenges and Opportunities with the Best X-ray and Neutron Sources*
- RACIRI 2018, on Rügen Island, Germany: *From Basic Science and Applications to Technologies inspired by Nature*

RACIRI Summer Schools address mainly PhD students, master (diploma) students in their final research year, and young postdoctoral researchers from institutions predominantly of the three partner countries.

It is one of the main goals of RACIRI Summer Schools to strengthen the 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, structure and program of the summer schools emphasize a stimulating learning environment with sufficient time for social & cultural activities among the students. 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 should stimulate the interaction and a close dialogue between the generations.

The RACIRI Summer Schools 2016, 2017, and 2018 are also supported in part by CREMLIN ("*Connecting Russian and European Measures for Large-scale Research Infrastructures*") - a Coordination and Support Action under Horizon 2020, funded by the European Commission, Grant Agreement No. 654166 ([www.cremlin.eu](http://www.cremlin.eu)).

## **Participation and how to apply**

In general, admittance to the RACIRI Summer School is based on national calls in the partner countries Sweden, Russia and Germany and granted through a nomination process based on scientific excellence. Each country will organize the calls and the nomination process autonomously and may engage for that purpose national research organizations to rely on their experiences, networks and best practice mechanisms in advertising the RACIRI Summer School and in nominating young researchers.

**The RACIRI Summer School: 25.08.2018 – 1.09.2018**



## **Call for Application for Participants from Swedish Institutions**

The focus theme of the RACIRI 2018 Summer School is “*From Basic Science and Applications to Technologies inspired by Nature*” (<http://www.raciri.org/>). Its venue is the Cliff Hotel Rügen on Rügen Island, Germany (<https://www.cliff-hotel.de/en/>).

The RACIRI 2018 Summer School offers up to **20 scholarships** (courses, food, and lodging) for students and young scientists working at Swedish research institutions or universities.

We expect the applicants to be highly qualified senior master students in the final phases of their study programs (master/diploma), or PhD students with proven academic background and necessary qualifications, or young scientists (postdocs). Students and young scientists wishing to participate must first apply and may then be nominated by a committee (based on their academic accomplishment, research and education experience and with consideration of gender balance).

**In Sweden, the Swedish Steering Committee will organize the nomination process for the Röntgen Ångström Cluster. Successful applicants will receive an invitation to attend the RACIRI 2018 Summer School.**

Applicants are requested to electronically submit:

- a CV
- a one-page (A4) motivation letter explaining **why she/he** would like to participate and how this might benefit his/her ongoing or planned research
- One support letter from the supervisor or the director of research

**All documents must be submitted by June 11<sup>th</sup> 2018**

Please send all application documents electronically to: <mailto:RACIRI2018@vr.se>

### **Organizers:**

The RACIRI Summer School is embedded in the scientific cooperation frameworks of the Röntgen-Ångström-Cluster (RAC) and the Ioffe-Röntgen-Institute (IRI). Organizing institutes are the Deutsches Elektronen-Synchrotron (DESY) in Germany, the NRC “Kurchatov Institute” in Russia and the Swedish Research Council Vetenskapsrådet.

