



# ANS

# AccApp'20

14th International Topical Meeting on Nuclear Applications of Accelerators

April 5-9, 2020 | IAEA, Vienna International Centre | Austria



IAEA  
International Atomic Energy Agency

## CALL FOR PAPERS

### EXECUTIVE CHAIRS

#### *General Chair*

Philip L. Cole, Lamar University, USA

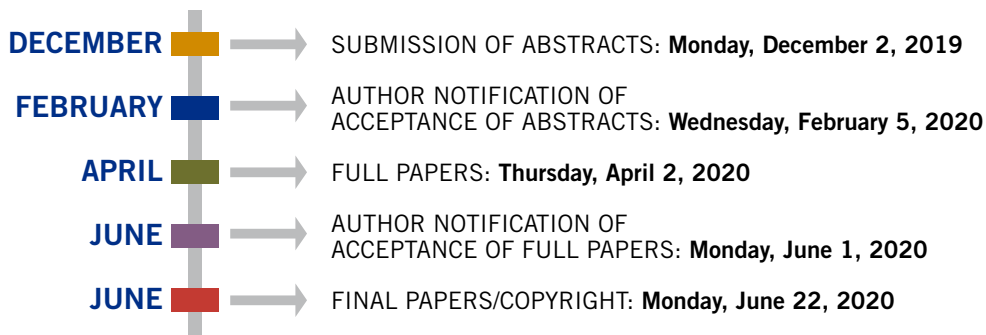
#### *General Co-Chair*

Aliz Simon, IAEA, NAPC

#### *Technical Program Chair*

Valeriia N. Starovoitova, IAEA, NAPC

### ABSTRACT DEADLINE: MONDAY, DECEMBER 2, 2019



**AccApp'20** is the fourteenth international topical meeting on the applications of accelerators; it is being organized by the Accelerator Applications Division of the American Nuclear Society (ANS) in co-operation with the International Atomic Energy Agency (IAEA). **AccApp'20 will be held at the IAEA Headquarters in the Vienna International Centre, Vienna, Austria, 5-9 April 2020.**

The purpose of these topical AccApp meetings is to provide an international forum for discussing the various applications of particle accelerators. Meetings are focused on the production and utilization of accelerator-produced neutrons, photons, electrons and other particles for scientific and industrial purposes; production or destruction of radionuclides significant for energy, medicine, defense, or other endeavors; safety and security applications; forensic science; medical imaging, diagnostics, and therapeutic treatment. One of the great strengths of the AccApp meetings is the dissemination of knowledge on the diverse applications of accelerators.

The conference provides an opportunity for nuclear physicists, accelerator physicists, nuclear engineers, and other experts in the international community to meet and discuss their research face-to-face. These interactions can help establish good working relationships and collaborations to solve common problems across multiple disciplines. Also, old friendships can be cultivated, and new ones established. You are cordially invited to participate in AccApp'20 by submitting an abstract, making an oral or poster presentation, and submitting a full paper for publication in our conference proceedings.

The deadline for abstract submission (250-word limit) is December 2, 2019. Full papers (10 pages or less) are due on April 2, 2020. For each extra page beyond 10 pages, there will be charge of \$100 per page. The templates for abstract and full paper preparation can be found at [accapp20.org](http://accapp20.org)

### SUBMIT AN ABSTRACT

[epsr.ans.org/meeting/?m=322](http://epsr.ans.org/meeting/?m=322)

### PROCEEDINGS COORDINATOR

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## ACCAPP'20 TOPICS

### 1. ACCELERATOR FACILITIES

- a. Progress at Currently Operating Facilities and Facilities Under Construction
- b. Future, Upgrades, and Reset Possibilities
- c. Shutdown Plans and Decommissioning Plans
- d. Management and Strategy for Accelerator Facilities
- e. Accelerator Driven Systems

### 2. ACCELERATOR DESIGN AND TECHNOLOGY

- a. New Concepts and Prototyping for Accelerator Design (Including Low Energy)
- b. Needs for Codes and Model Development
- c. New Trends in Instrumentation
- d. Radiation Protection and Shielding
- e. Availability and Reliability Analyses

### 3. HIGH-POWER ACCELERATOR COMPONENTS AND TARGETS

- a. Windows, Beam Monitoring Systems, and Beam Dumps
- b. Targets

### 4. NUCLEAR DATA

- a. Nuclear Reaction Models and Applications
- b. Charged Particle, Fission and Fusion Cross-Sections and Applications
- c. Photonuclear Cross-Sections and Application
- d. High Energy Particle Modelling, Experiments, and Applications

### 5. ACCELERATORS FOR MATERIAL SCIENCE

- a. New Structural Materials for Fission and Fusion Reactors
- b. Effects of Heavy Ions on Materials
- c. Effects on Materials for Microelectronics with Fast Particles
- d. Low Energy Nuclear Methods for Space, Aviation, and Other Applications

### 6. ACCELERATORS FOR SECURITY AND FORENSICS

- a. Border Security
- b. Replacing High Activity Sources with Accelerator-Based Irradiators
- c. Nuclear Techniques for Forensics

### 7. ACCELERATORS FOR ENVIRONMENTAL STUDIES

- a. Environmental Monitoring
- b. Climate Change and Natural Disasters

### 8. MEDICAL APPLICATIONS OF ACCELERATORS

- a. Production of Medical Radioisotopes
- b. Hadron Therapy
- c. BNCT
- d. Radiobiology

### 9. INDUSTRIAL APPLICATIONS OF ACCELERATORS

- a. Electron and X-Ray Irradiation
- b. Industrial Applications of Ion Beams

### 10. ACCELERATORS FOR CULTURAL HERITAGE

- a. Authentication, Dating, and Characterization
- b. Conservation