



## *Consortium for Nuclear Power (CNP)* North Carolina State University (NCSU)

The mission of CNP is to promote research and development, innovation, education, and training as well as provision of technical support/expert advice/consultancy services that benefit the nuclear industry and its regulation.

Consortium will accomplish this through:

- *Collaborative research;*
- *Membership of Nuclear Power related software User's Groups (UGs) including CTF UG;*
- *Computational and experimental tools development and application;*
- *Education, training, and information dissemination;*
- *Sharing resources with the scientific community and stakeholders;*
- *Engaging the general public, policy makers and stakeholder.*

CNP's major scientific goals are to:

- *Increase research output;*
- *Attract new sources of funding;*
- *Address grand challenges of nuclear power;*
- *Find and develop new collaborations;*
- *Develop new and novel areas of research;*
- *Become an internationally recognized entity for partnership;*
- *Increase outreach and public awareness;*
- *Provide excellence in education, mentoring and training;*
- *Manage the software UGs such as: CTF UG (core thermal-hydraulic simulator), Core design and fuel cycle optimization UG, HTGR software UG, V&V and UQ software UG, Nodal simulator UG, etc.*



CTF-4 Meeting, May 8-9, 2017, AREVA GmbH, Germany



The CNP is managed by **Dr. Maria Avramova** as Director and guided by Industry Advisory Board (IAB). CNP consists of faculty, research scientists, research fellows, and graduate students. The Director works closely with CNP faculty and staff and the IAB to identify key areas of research in support of the technology of the industry and to establish short-range and long-range goals in pursuit of the mission of CNP. In like manner, the Director works with CNP faculty and staff, the IAB and NCSU to select and implement technology transfer and economic development activities of CNP. All companies, regardless of their geographical location/origin, engaged in the nuclear industry, national laboratories, research organizations, U.S. government and international organizations that have an interest in development of nuclear power, are entitled to be members of CNP.

The proposed consortium will exist as a member supported mechanism for funding research, innovation, technical support, education and training. There are five membership categories and associated privileges as well as a multiple-tier membership is available: Full, Affiliate, Startup, Academic and Partner members. Members may join any from the individual Nuclear Power related software UGs to manage code bases for software maintained and disseminated by CNP

For more information about CNP, please contact the Director of CNP – **Dr. Maria Avramova** ([mnavramo@ncsu.edu](mailto:mnavramo@ncsu.edu))