

# ND2016

## 11-16 / 09

### BRUGES BELGIUM



#### INVITATION

- ▶ ND2016 is the primary conference for the advancement of nuclear data in the interest of both science and technology. It addresses all important active fields of investigation: fundamental nuclear physics, astrophysics, nuclear energy, nuclear medicine, nuclear non-proliferation, safeguards and arms control.
- ▶ Data characterizing nuclear structure, decay modes and reactions are of paramount importance in many fields of research and application. Design studies, safety analyses, interpretations of tests, benchmarks and experiments as well as the need to address fundamental questions in both basic science and applications rely on good quality nuclear data. Significant progress is being made towards more comprehensive in-depth physics modelling through improved computing and data handling. Access to good quality nuclear data is a well-recognized pre-requisite for such successful analyses and reliable predictions.
- ▶ Establishing high quality nuclear databases tailored to the needs of very diverse fields of use encompasses activities that range well beyond a mere compiling of numbers reported in the literature. Areas where data are lacking, conflicting or of insufficient accuracy need to be actively identified and tackled by well-focussed experiments, modelling and evaluation. Complete databases must be established that are capable of serving all needs and tailored to the appropriate computing codes through proper regard of such aspects of physics as thermal scattering, self-shielding, anisotropy and the Doppler effect. Validation and verification of these databases in benchmarks, mock-up tests and responding to feedback from users are crucial steps towards adoption of a new nuclear data library by the end-users.
- ▶ Breakthroughs in experiments and theory are often the basis of technological progress. Recognizing this important fact, ND2016 will provide an appropriate forum for the communication of developments in fundamental nuclear physics research that may be beneficial to the nuclear data and allow interactions and exchange of experiences among the applications communities.
- ▶ The organisers of ND2016 invite all scientists and engineers interested in one of the topics of the conference to present their insights and achievements. The organisers are encouraging young scientists and engineers to participate through a reduced conference fee.
- ▶ This conference is part of a series of previous conferences organized in Harwell, UK (1978), Antwerp, Belgium (1982), Santa Fe, USA (1985), Mito, Japan (1988), Jülich, Germany (1991), Gatlinburg, USA (1994), Trieste, Italy (1997), Tsukuba, Japan (2001), Santa Fe, USA (2004), Nice, France (2007), Jeju island, South Korea (2010) and New York, USA (2013).
- ▶ The aim of these conferences is to create a forum for the presentation and discussion of all aspects of nuclear data and their applications. The conference will include a wide variety of nuclear data topics including:

#### TOPICS

- ▶ Nuclear reaction measurements, analysis and evaluation
- ▶ Nuclear masses, structure and decay data measurements
- ▶ Nuclear reaction and structure theory, models and codes
- ▶ Fission physics and observables
- ▶ Spallation, high and intermediate energy reactions
- ▶ Nuclear physics of fusion
- ▶ Astro nuclear physics
- ▶ Experimental facilities, equipment, techniques and methods
- ▶ Integral experiments, benchmarks and data validation
- ▶ Importance of nuclear data for reactor operation and safety
- ▶ Importance of nuclear data for other applications
- ▶ Nuclear data in science and engineering
- ▶ Medical radioisotopes production
- ▶ Particle therapy
- ▶ Properties of medical radioisotopes
- ▶ Novel radioisotope production methods
- ▶ Evaluated libraries, processing and consistency
- ▶ Evaluation methodology
- ▶ Uncertainty and covariance generation and propagation
- ▶ Thermal scattering laws and libraries
- ▶ Dissemination, data formats and storage
- ▶ Education

FIRST ANNOUNCEMENT

## CONGRESS VENUE

- ▶ Bruges is the capital and largest city of the province of West Flanders. Bruges has most of its medieval architecture intact. The city of Bruges is frequently called : “The Medieval Manhattan”. This historic city centre is a prominent World Heritage Site of UNESCO. Thanks to its central location in Flanders, Bruges is very easily accessible: just 1 hour away from Brussels international airport, 45 min from Brussels Midi railway Station.
- ▶ The Conference will be held at the Oud Sint-Jan, a historic building in the heart of the city near the canals. Oud Sint-Jan served as a hospital from the Middle Ages till the nineteenth century and is nowadays being used as a modern Congress Centre. The congress venue, the hotels and the places for the social program are all within walking distance from the railway station.

## GENERAL CHAIRS

- ▶ Vladimir Sucha,  
Director-General Joint Research Centre, European Commission
- ▶ William D. Magwood, IV,  
Director-General OECD Nuclear Energy Agency

## ORGANIZING COMMITTEE

- ▶ Arjan Plompen (chair)
- ▶ Wim Mondelaers
- ▶ Peter Siegler
- ▶ Carmen Cabanillas Platero
- ▶ Franz-Josef Hambsch
- ▶ Jan Heyse
- ▶ Stefan Kopecky
- ▶ Stephan Oberstedt
- ▶ Peter Schillebeeckx

## ORGANISED BY

- ▶ Joint Research Centre, European Commission



## IMPORTANT DATES & DEADLINES

- ▶ Abstract submission deadline: **17/01 2016**
- ▶ Registration open: **17/11 2015**
- ▶ Early registration deadline: **11/07 2016**
- ▶ Deadline for contribution: **16/09 2016**

[www.nd2016.eu](http://www.nd2016.eu)

International Conference on Nuclear Data for Science and Technology