



## TopFuel 2015 – Call for Papers

**TopFuel 2015 will take place from 13 – 17 September 2015 in Zurich, Switzerland**

TopFuel's primary objective is to bring together leading specialists in the field from around the world to analyse advances in nuclear fuel management technology and to use the findings of the latest cutting-edge research to help manufacture the high performance nuclear fuels of today and tomorrow.

The **TopFuel 2015** Programme Committee is calling for both oral and poster presentations in the following themes:

### **Operation and experience**

Fuel operating experience and performance (reliability, fuel assembly degradation and failures, handling incidents, water side corrosion and hydriding, stress corrosion cracking, PIEs, pool side examinations, radiation effects, etc.); high BU fuels; water chemistry and corrosion/crud/doses counter-measures; fuel assembly distortion; mixed cores operation; reload variability; operation flexibility (power modulation or load followup); fuel assembly repair, fuel qualification and licensing.

### **Transient Fuel Behaviour**

Transient fuel behavior and criteria (RIA, LOCA, ATWS, PCI/SCC, PCMI ...); fuel safety related issues; fuel fragmentation, relocation and dispersal; long term coolability; re-criticality; transient fission gas release; cladding burst/ballooning mechanisms; fuel behaviour under extended loss of cooling; small and large scale fuel testing facilities.

### **Advances in designs, materials and manufacturing**

Fuel Assembly design; fuel design, processing and manufacturing (MOX, additive fuel, innovative fuel concepts, etc... ); cladding and structural alloys development; mechanical and corrosion resistant behaviour; irradiation experience in MTR; fuel design optimisation for disposal.

### **Enhanced accident tolerance (ATF)**

International development roadmaps and status; advanced fuel designs, fuel rod, fuel cladding and component materials behaviours; metrics definition; qualification and licensing issues; deployment scenarios (from manufacturing and in reactor normal operation to beyond DBAs and back-end).

### **Modelling, analysis and methods**

Development, verification, validation and uncertainty quantification (VVUQ) of fuel modelling codes; multiscale modelling (including ab initio); multi-physics coupling; water chemistry modelling; experimental data and applicability; transposition to in-reactor and back-end conditions; statistical uncertainty analysis; design and analytical methods;

### **Used fuel storage, transportation and re-use/material recovery**

Closed fuel cycles (re-use); re-use after transportation/storage; interim storage, dry storage, wet storage, long term storage strategies; handling and transportation of damaged, high BU and non-standard fuels; R&D activities; ageing issues; criteria and regulation; fuel database management.



Mark your diaries and be a part of it! Upload your abstracts on [www.topfuel2015.org](http://www.topfuel2015.org) before **12 December 2014**.

**Authors should submit their abstract text in English through the Abstract Submission System on [www.topfuel2015.org](http://www.topfuel2015.org) by:**

**12 December 2014**

**Deadline for draft paper submission: 10 April 2015  
Revision of papers and author notification: 15 June 2015  
Deadline Final Paper: 1 August 2015**

**Email ALL correspondence to [topfuel2015@euronuclear.org](mailto:topfuel2015@euronuclear.org) .**

**Your abstract contribution will be included in the Conference Proceedings that will be posted on the ENS website: [www.euronuclear.org](http://www.euronuclear.org) with reference number ISBN 978-92-95064-23-2.**

### **Abstract review**

The abstracts received will be peer reviewed under the auspices of the **TopFuel 2015 Programme Committee**. Authors will be notified of paper acceptance by **1 February 2015**.

#### **Conference Secretariat**

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