

**International Workshop  
on  
Nitrogen Compounds in Radiation Chemistry**



**June 11th, 2009  
Ecole des Mines, Nantes, France**

Water radiolysis in presence of N<sub>2</sub> is probably the topic the most controversy in the field of water radiolysis. It still exists a strong discrepancy between the different reports of ammonia formation by water radiolysis in presence of N<sub>2</sub> and moreover in absence of oxygen there is no agreement on the formation or not of nitrogen oxide like NO<sub>2</sub><sup>-</sup> and NO<sub>3</sub><sup>-</sup>.

These discrepancies come from multiple sources : - the complexity of the reaction mechanisms where nitrogen is involved - the experimental difficulties - and, the irradiation conditions.

The aim of the workshop is to capitalize the knowledge needed to go further in simulations and understanding the problems caused (or not) by the presence of nitrogen / water in the environment of radioactive materials. Implications are evident in terms of corrosion, understanding of biological systems and atmospheric chemistry under radiation.

Topics covered would include experimental and theoretical approaches, application and fundamental researches:

1. Nitrate and Ammonia in radiation chemistry in nuclear cycle.
2. NO<sub>x</sub> in biological systems and atmospheric chemistry.
3. Formation of Nitrogen compounds in Nuclear installations.
4. Nitrogen in future power plant projects (Gen4, ITER...) and large particle accelerators.

**Title and Abstract Submission**

A few oral presentations and posters will be added to invited papers (3-4) after submission. Titles and Abstracts should be submitted by April 1st, 2009 to the organizers.

For Further Program and Registration Information: <http://iramis.cea.fr/radiolyse/workshop.php>

**In coordination with the Workshop  
"Journée Radiolyse du GDR PARIS"  
standing on Friday the 12th in June 2009**

**Organizers:**

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CEA, Saclay

**International Advisory Board :**

S. Pimblot (UK), J. Wishart (USA),  
Y. Katsumura (Japan), M. Mostafavi (Fr)



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