LeCoq de Boisbaudran award

The award is bestowed triennially, is sponsored by a company interested in rare earths, and is given for "an outstanding and long-lasting contribution to the science and/or technology of the f-elements".

Who was Paul-Emile Lecoq de Boisbaudran ?

Paul-Emile LeCoq de Boisbaudran, who was born in Cognac in 1838 and died in Paris in 1912, did not get any higher education (he did not seek any either). He nevertheless discovered three elements, gallium in 1875, samarium in 1879, and dysprosium in 1886. He was instrumental in crystal chemistry and in applying physical methods to chemistry, particularly electrolysis and spectroscopy; he built a systematic data bank of spectral lines for instance. He also had several winning controversies with Crookes.

Who were bestowed the award?

Madrid 2000 **ICFE'4** **Dr. Paul Caro (CNRS)**

For his thoughtful and innovative contributions to the field of rare earths
Born in 1934, studied chemistry at the École nationale supérieure de chimie de Paris (ENSCP), where he was attracted to rare earth chemistry by Félix Trombe. Paul Caro entered the Centre national de la recherche scientifique (CNRS) in 1955 and started his own research on rare earth elements with emphasis on solid state chemistry and spectroscopy. He also acted as scientific councilor of La Cité des Sciences in Paris and as the chief of public relations of CNRS.

Geneva 2003 **ICFE'5** **Prof. Herbert Schumann (TU Berlin)**

For his seminal contribution to the field of organolanthanide complexes and their application as polymerization catalysts.
Born in Coburg, Germany, in 1935. He received a diploma degree in 1961 and a PhD degree in 1962 from the Ludwigs-Maximilians University in München.
His main research interests are focused on organolanthanide chemistry but his skills extend also to main group and transition element chemistry for homogeneous catalysis. he is the author of 25 volumes of the Gmelin Handbook of Inorganic and Organometallic Chemistry.

Wroclaw 2006 **ICFE'6** **Prof. Jean-Claude Bünzli (EPF Lausanne)**

For more than 30 years of outstanding research and other activities in lanthanide chemistry and for promoting f-block chemistry through teaching and editing as well as by the organizing of scientific events.
Born in Moutier, Switzerland in 1944. He received a PhD from the Swiss Federal Institute of technology, Lausanne in 1968. After stays in Vancouver and Zürich, he creates a research group on rare earths in 1974. His main interests lie in coordination and supramolecular chemistry, with emphasis on the relationship between structure and luminescent properties. He has recently advocated the use of lanthanide luminescent probes (LLBs) for the staining of live cells.

Köln 2009 **ICFE'7** **Prof. Claude Piguet (University of Geneva)**

For a seminal contribution to supramolecular chemistry of lanthanides and more particularly to its rational understanding through thermodynamic models

Born in 1961, he received a PhD from the University of Geneva in 1989. After postdoctoral stays in Strasbourg (with Professor Lehn) and Lausanne, he builds his own research group at University of Geneva and applies supramolecular principles to lanthanide chemistry and spectrochemistry. He receives the Werner grant in 1995 and become full professor inorganic chemistry in 1999, succeeding to Prof. C. K. Jorgensen. His main research interests lie in supramolecular chemistry, with emphasis on the thermodynamics of formation of polynuclear and polymetallic helicates. He also uses metal communication in these molecular entities to control photophysical properties. In particular, he has demonstrated in 2011 the first upconversion phenomena in a molecular complex of erbium with organic ligands.

Udine 2012 **ICFE'8** **Prof. David Parker (Durham University)**

For his outstanding and far-reaching contributions to the field of bioanalyses and bioimaging.

Born in County Durham in 1956, he studied at Oxford (MA, DPhil) and was a NATO Fellow in Strasbourg with Jean-Marie Lehn. In 1982, he was appointed as a Lecturer at Durham University and has examined the analytical, diagnostic and therapeutic applications of rare-earth metal complexes. He successfully took advantage of the large thermodynamic stability and kinetic inertness of cyclen-based chelates to develop ratiometric bioanalyses and luminescent stains for in vivo cell imaging. His current research seeks to harness a mechanistic understanding of lanthanide complexation behaviour, including making use of their inherent chirality.

Oxford 2015 **ICFE'9** **Prof. Roberta Sessoli, University of Florence**

For her pioneering work on the development of molecular magnetism of rare earths relevant to magnetic resonance imaging and information storage at the molecular level.

Born in Florence, Italy, in 1963, she studied at the University of this city (Laurea in chimica, PhD) and was appointed as an associate researcher (1997), associate professor (2000), and full professor (2012) at the Faculty of Pharmacy. She has been producing ground breaking research in molecular and nanoscale magnetism. In particular, she demonstrated in 1993 that a few paramagnetic metal ions in a molecule can behave like a magnet: single molecule magnets were born. Later, in 1996, she contributed to the discovery of quantum tunneling in nanomagnets. This work, which has consequences on magnetic resonance imaging and information storage at the molecular level puts her in a world-leading position, at the crossing between supramolecular chemistry, magnetism, and nanosciences.

Regulations of the award

1. The LeCoq de Boisbaudran award, subsidised by an industrial partner is in principle bestowed every three years during the ERES-sponsored International Conference on f-Elements (ICFE).
2. The awardee may be of any nationality and may be located in an academic, governmental or industrial institution, or elsewhere.
3. The award is given for outstanding and long-lasting contribution to the science and/or technology of the f-elements. Major contributions to other areas of science or technology should not be part of the decision. On the other hand, other factors may be considered in the evaluation of the candidates, such as contributions to (i) teaching or graduate training in f-elements, (ii) professional societies, (iii) publications related to f-elements (editorships, etc.).
4. The call for nominations is published in the ERES Newsletter and on the web site of the association. Nominations can be proposed by any scientist or industry people active in the field of f-elements; they should be accompanied by a full curriculum vitae of the proposed candidate and, whenever possible, they should be backed by seconding letters covering information complementary to the nominating letter.
5. The nomination committee is comprised of the ERES executive committee enlarged by one representative from the sponsor, by the chair of the ICFE conference and, depending on the candidates proposed, by experts in the relevant fields, appointed by the executive committee.

Approved by the General council of ERES, Madrid, September 21, 2000.

The 2006 award

The 2009 award