

Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: <https://orca.cardiff.ac.uk/id/eprint/108652/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Fechete, Ioana, Idriss, Hicham, Hutchings, Graham ORCID: <https://orcid.org/0000-0001-8885-1560>, Bond, Geoffrey and Garin, François 2017. Catalytic reactivity of surfaces: in recognition of François Gault. *Catalysis Science & Technology* 7 (22) , p. 5181. 10.1039/C7CY90088K file

Publishers page: <http://dx.doi.org/10.1039/C7CY90088K>
<<http://dx.doi.org/10.1039/C7CY90088K>>

Please note:

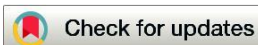
Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies.

See

<http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.





Catalytic reactivity of surfaces: in recognition of François Gault

Ioana Fechete,^{*a} Hicham Idriss,^b Graham Hutchings,^c
Geoffrey Bond^d and François Garin^a

François Gault (7 January 1931–4 August 1979), a French scientist whose 85th birthday we celebrated in 2016, was a star of unequalled brilliance in Europe's intellectual firmament. As the founder of the Laboratories of Catalysis of Caen (1960) and Strasbourg (1971), he was interested in the study of the catalytic mechanisms of hydrocarbons using isotope tracing (^{13}C and D_2). He was the first to demonstrate the isomerization of alkanes on platinum metal films. François Gault was a perfectionist; the development of his research followed the same trend as analytical progresses and he always pushed the limits of techniques for the highest possible data quality. He was a forerunner in his field, as the use of labelled molecules to understand better the catalytic mechanisms of hydrocarbon rearrangement demonstrated. Each article in this issue is the culmination of a detailed study on a current topic in heterogeneous catalysis. These articles

highlight a number of fundamental aspects of modern heterogeneous catalysis, surface phase behavior, adsorption and reaction properties and particle size effects on chemical reactions.

Among Gault's personal characteristics, he was profoundly interested in everything that happened around him, always asking essential questions and seeking explanations. He had all the qualities of a leader and knew it. Above all, he was kind and he is very sadly missed by many of his friends and pupils.

In recognition of his work and personality, the European Federation of the Catalysis Societies (EFCATS) has founded the François Gault Lectureship Award. The award is given every two years to a distinguished scientist as Europe's highest honor in the field of catalysis. This special issue is based on papers presented by winners of the François Gault Lectureship Award, and

former students, colleagues, and friends of Gault.

We are grateful to all the authors of this special issue of Catalysis Science & Technology, who dedicated great time and effort to preparing these high quality manuscripts. We also thank all the reviewers for their valuable and committed work. We would like to express our warm thanks to Piet van Leeuwen, Matt Cude and Carri Cotton, who coordinated the handling and collection of the manuscripts for this special issue with a high degree of professionalism. We sincerely thank all of the editors of Catalysis Science & Technology who were involved in this special issue. We hope that the publication of this collection of articles motivates researchers and improves our fundamental and applied understanding of the complex phenomena behind surface-adsorbate interactions and their effects on natural and man-made catalytic reactions.

^a Institut de Chimie et Procédés pour l'Énergie, l'Environnement et la Santé, ICPEES, UMR-CNRS 7515, Université de Strasbourg, 25, rue Becquerel, 67000 Strasbourg, France.

E-mail: ifechete@unistra.fr, i_fechete@yahoo.com

^b SABIC-CRI, Thuwal, 23955 Saudi Arabia

^c Cardiff Catalysis Institute, School of Chemistry Cardiff, University Cardiff, UK CF10 3AT

^d Brunel University, Uxbridge UB8 3PH, UK