

Chemistry & Industry

where science
meets business

Issue No 2
21 January 2002
www.chemind.org

£18

Catalysts - the vital agent of change

Cartels - swi roundabouts

Ref: BT PF 160102/09
CHEMISTRY & INDUSTRY
21.01.02 Vol: 2002 No. 2
0009-3068 22304673
EDITIONS CHIHAB
ZI. LOT B5
B.P. 744 REGHAIA
GG ALGER
ALGERIE

Df: 31146376
03.06.02

جامعة البليدة
المكتبة المركزية

Asbestos

Dow feels the pain p5

Palladium

New valence state p10

Unilluminated life

Microbes thrive in dark p5

http: www.chemind.org

Editor **Simon Robinson**

E-mail: editor@soci.org

News **Marina Murphy, Richard Butler**

E-mail: news@soci.org

Features **Claire Curran**

E-mail: features@soci.org

Art Editor **Julia Cheftel**

Production **Laurence McJannet**

Editorial Administrator **Princess Johnson**

E-mail: enquiries@soci.org

Advertising **Dominic Young, David Roberts**

E-mail: advertising@soci.org

Editorial & Advertising Offices

14/15 Belgrave Square,
London SW1X 8PS, UK
Tel: +44 (0)20 7598 1500
Fax: +44 (0)20 7235 9410
Advertising by Roscoe Services Limited

International Advisory Board

Sir James Black Kings College Hospital
Medical School London
Umberto Colombo ENEA, Rome
Roald Hoffmann College Cornell
University, Itaca, NY
Ralph Landau Listowel, NY
Lord Lewis University of Cambridge, UK
Yasunori Nishijima Kyoto University, Japan
Gerhard Wegner Max-Planck-Institut für
Polymerforschung, Mainz, Germany

Subscriptions Orders & Enquiries

Subscription enquiries can be sent by e-mail to
subscriptions@soci.org.
USA, Canada & Mexico 2002 subscription rate:
US\$560. Orders with payment to the Society of
Chemical Industry, Turpin Distribution, Blackhorse
Road, Letchworth, Herts SG6 1HN, UK. T: +44
(0)1462 672555; F: +44 (0)1462 480947. All
copies sent air speed to the USA.
USA POSTMASTER: send address changes to
Chemistry & Industry, 200 Meacham Avenue,
Elmton, NY 11003. Periodical postage paid at
Jamaica, NY 11431. Canadian GST Reg. No.
R127571347.
Japan 2001 subscription rate: £360. Orders with
payment to USACO, 17-12, Higashi-Azabu, 2-
chome, Minato-ku, Tokyo 106-0044.
Rest of world 2001 subscription rates: EU and
ROW £360. Orders with payment to Society of
Chemical Industry, Turpin Distribution (see
above). Delivery outside UK by air speed.

SCI Members' Enquiries

Queries and address changes to SCI
Member Services, 14/15 Belgrave Square,
London SW1X 8PS.
T: +44 (0)20 7598 1500; F: +44 (0)20
7823 1698; E-mail: members@soci.org;
Web address: www.soci.org.

Chemistry & Industry

© Society of Chemical Industry 2001.
ISSN 0009-3068. C&I is published twice a
month by the Society of Chemical Industry,
14/15 Belgrave Square, London SW1X
8PS. Printed by The Friary Press,
Dorchester, UK

Chemistry & Industry is editorially
independent of, but published by, Society
of Chemical Industry



Chemistry & Industry

Number 2

21 January 2002

Regulars

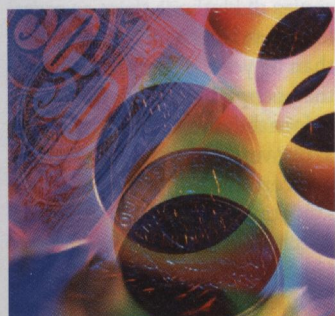
News	Physicists find new state of matter	8
Diary	The latest shows, exhibitions and meetings	12
Data analysis	Germany faces an uncertain year ahead	13
Patents	Another reason why we should eat chocolate	14
Reviews	Coffee developments and food safety	26
Highlights	Organometallic and inorganic chemistry	29



PhotoDisc

Process catalysis

18 Catalytic costs can form a substantial part of the investment in a plant, so mathematical modelling and computer simulations of catalytic processes can minimise costs and optimise operation



Corbis

News

10 Two schemes harvesting tidal energy from the sea get the go-ahead



Manager

Cartels

15 2001 saw the greatest number of fines ever imposed by the European Commission against cartels, so although the rewards for price fixing might be high, the risks are just as great

Cover illustration: Roche Vitamins