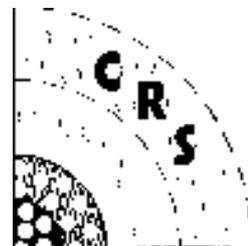




# UKCRS Newsletter



United Kingdom Controlled Release Society

July 1995

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**W**elcome to the first UK Controlled Release Society Newsletter. This newsletter, which will be published on an annual basis, will contain the latest UKCRS news and details of future meetings. In addition, up to date information can be found on the UKCRS pages on the Internet.

## Contents

What is the UKCRS.....	2
A Message from the President of the Controlled Release Society.....	2
A Questionnaire on UKCRS Activities.....	2
The UKCRS Committee.....	3
UKCRS on the Internet.....	5
First UKCRS Meeting.....	5
Second UKCRS Meeting.....	6
About the Controlled Release Society.....	6
Annual CRS Symposia Dates .....	7
Other CRS Meetings.....	8
Joining the CRS.....	8
Contacting the CRS.....	8
Contacting the UKCRS.....	8

## **What is the UKCRS?**

The Controlled Release Society (CRS) was founded in the United States over two decades ago to advance the science and technology of controlling the release and delivery of active agents. It is recognised worldwide as the premier professional society in this still developing field. The CRS is establishing local “chapters” of the organisation around the World and the UKCRS was formed in 1994 to cater for our needs here in the UK. The UKCRS intends to address a broad range of research fields based on controlled release which include agriculture, veterinary, food and cosmetic sciences. The Committee has drawn up several key aims and objectives, principally:

- To develop the UK Controlled Release Society into the primary national organisation for the representation, education, and dissemination of information to scientists from all disciplines who are interested in any aspect of controlled or advanced delivery.
- To broaden the understanding of controlled release science through the organisation of workshops and meetings where lectures presented by scientists drawn from inside and outside the society shall promote discussion and exchange of views.
- The Society shall seek to develop links with other scientific organisations and to make representations to government, professional and scientific bodies on issues which may promote the interests of the controlled or advanced delivery community.

## **A Message from the President of the CRS**

The successful establishment of a Local Chapter of the Controlled Release Society is always a great event for the Society. First of all I would like to thank all those people who have taken the efforts to inaugurate the UK Local Chapter. They have been very effective in organizing the first UKCRS meeting and also in establishing a Newsletter and I am proud to be invited to contribute to the first issue. The controlled release of bioactive materials has become a multidisciplinary research effort around the world with the common aim to improve the welfare of mankind. The goal of the Controlled Release Society is to coordinate these efforts to create a common platform of discussion for the exchange of results and knowledge. It is felt by the CRS Executive Committee that realisation of these prestigious aims has also to be based on local activities around the world and therefore the formation of Local Chapters has been stimulated. In the years to come CRS will pay up to US\$ 8000 per year to one of the Local Chapters for e.g. funding of a congress. The UKCRS is encouraged to submit an application. The UK plays a leading part in science and technology worldwide. I am convinced that the UKCRS will follow this tradition and will become a very strong and effective part of CRS. I wish the UKCRS Local Chapter with all of my heart: vivat, crescat, floreat!

H.E. Junginger  
President of CRS

## **A Questionnaire on UKCRS Activities**

The development of the UKCRS will largely depend on feedback we get from our UK membership. We wish to know what your needs are from the UKCRS, what form of meetings, courses and other activities you would like to see. Along with this newsletter you will find a questionnaire canvassing your opinions which will be helpful in assisting the committee in directing the future of the UKCRS. Please spare a few minutes to complete the questionnaire and return to Marianne Ashford. This can be done either via mail, FAX or from our World Wide Web page.

## The UKCRS Committee

### Marianne Ashford - Market Research

**Address:** Pharmaceutical Department, Zeneca Pharmaceuticals, Mereside, Alderley Park, Macclesfield, Cheshire SK10 4TG

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Marianne is currently working in the Pharmaceutical Research Section of Zeneca Pharmaceuticals. After completing a PhD at the University of Manchester on oral delivery to the colon, Marianne joined Zeneca. She has been working on various approaches to improving the biopharmaceutical properties of compounds and more recently has been reviewing methods for gene and oligonucleotide delivery.



### Jane Batten - Treasurer

**Address:** Stowic Resources Ltd., 7 Elm Place, Eynsham, Oxford OX8 1PU

**Tel:** 01865 881110 **FAX:** 01865 881534

Jane is currently Chief Executive of Stowic Resources, a transdermal drug delivery company. After a degree in Biological Sciences at Leicester, specialising in biochemistry, and a PhD at Exeter, she was articled to KPMG to study chartered accountancy. Jane then entered the multinational pharmaceutical industry holding posts in international marketing, business development and licensing. Until recently, Jane was the Business Development and Licensing Director at Debio R.P. in Switzerland, a company specialising in the controlled release of peptides.

### Julie Binns - Industrial Liaison

**Address:** Scherer DDS, 9 South Avenue, Clydebank Business Park, Clydebank G81 2NR

**Tel:** 0141 941 3626 **FAX:** 0141 952 9473

Julie is currently Manager of the Formulation Development Group at Scherer DDS. After graduating from Nottingham University, Julie spent 5 years in formulation research at the Wellcome Foundation, returning to Nottingham to undertake a PhD on the properties of hydrophilic matrix systems. Julie is currently working at Scherer DDS on oral pulsatile delivery systems for a range of applications.



### Duncan Craig - Academic Liaison

**Address:** The School of Pharmacy, University of London, 29/39 Brunswick Square, London WC1N 1AX

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Duncan is a lecturer in the School of Pharmacy at the University of London. After graduating from Bath University, Duncan undertook a PhD on dielectric spectroscopy of pharmaceuticals. His current research interests embrace the assessment of physical structure of materials and more recently, biological materials using biophysical techniques.

## **Tony D'Emanuele - External Relations**

**Address:** Department of Pharmacy, University of Manchester, Manchester M13 9PL

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Tony is a lecturer in the Department of Pharmacy at the University of Manchester. After graduating from The School of Pharmacy, University of London, Tony undertook a PhD at the University of Bath on responsive electrophoretic drug delivery. Tony took up his current appointment after an eighteen month postdoctoral fellowship with Professor Robert Langer at MIT where he investigated the use of ultrasound to modulate drug release from biodegradable implants. Tony is currently researching pulsatile and responsive delivery systems, biodegradable polymeric systems, and the delivery of genes into cells by means of sonication.



## **Martyn Davies - Secretary**

**Address:** Department of Pharmaceutical Sciences, The University of Nottingham, Nottingham NG7 2RD

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Martyn is Reader in Biomedical Surface Chemistry at the Department of Pharmaceutical Sciences, University of Nottingham. Martyn took his PhD at the Chelsea College, University of London on surface chemistry of substituted cellulose. Since 1985, he has been studying the surface chemistry of pharmaceuticals and biomaterials using surface techniques. Recently, Martyn has been employing surface imaging techniques to visualize biomolecular structure and interactions. Martyn is the Director of the Laboratory of Biophysics and Surface Analysis within the University.

## **Ruth Duncan - Chairperson**

**Address:** The School of Pharmacy, University of London, 29/39 Brunswick Square, London WC1N 1AX

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Ruth has recently been appointed to the Chair of Cell Biology and Drug Delivery at the School of Pharmacy, London University and is Director of the Centre for Polymer Therapeutics. Ruth was formerly the Director of the CRC Polymer Controlled Drug Delivery Group at the University of Keele where she studied the biological fate and processing of soluble polymer delivery systems. After a period of three years at Pharmacia, Farmitalia Carlo Erba, Milan as Head of New Technologies, Ruth is continuing her research on the biological rational design of soluble polymeric drugs and carriers particularly in relation to cancer chemotherapy.



## **Colin Pouton - Meetings Coordinator**

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Colin is a senior lecturer in the School of Pharmacy and Pharmacology at the University of Bath where he has been a member of staff since 1982. Colin directs a research group working on melanocortin biochemistry and the potential of melanocortins for targeting of drugs to melanoma. Colin took his PhD at Chelsea College, London on lipid formulations for improved bioavailability of hydrophobic drugs via the gastrointestinal tract, and he maintains an interest in this area.

## **UKCRS on the Internet: Latest Information on Your Desktop**

The UKCRS has a series of Web pages on the Internet. The UKCRS was in fact the first pharmaceutical related society to operate a Web server (since December 1994). We will use this effective system for the dissemination of the latest information on the UKCRS and parent CRS. The page is maintained on PharmWeb, the pharmacy information resource based at the University of Manchester and the UKCRS page may be accessed by anybody with a computer connected to the Internet. A World Wide Web program (browser) such as Netscape or Mosaic is required. The URL (address) of the UKCRS page is:

<http://www.mcc.ac.uk/pharmweb/ukcrs.html>

### **First UKCRS Meeting - Nottingham 1995**



**Speakers at the UKCRS Meeting. From left to right: Prof. Sandy Florence, Dr. David Attwood, Dr. C. Pouton, Dr. Gary Martin and Prof. Bob Davis.**

The inaugural meeting of the UK Controlled Release Society was held on January 9th, 1995 at the University of Nottingham hosted by Dr. M. C. Davies. The meeting, entitled "Controlled Drug Delivery in the UK - Current Perspectives and Future Horizons", was attended and very well received by over 130 scientists from both industry and academia. Professor Sandy Florence opened the meeting and reviewed some of the approaches to responsive drug delivery, Dr. Colin Pouton followed with a talk on melanocortins and receptor mediated delivery and the final talk before lunch was by Dr. David Attwood on the applications of block copolymers to controlled release. The poster session held during the lunch interval exhibited approximately 15 posters and provided a good opportunity to discuss exciting new developments and meet colleagues from the UKCRS. Professor Bob Davis delivered the opening talk in the afternoon session discussing "Biomedical Applications to Particle Engineering", Dr Gary Martin followed with a presentation on colon specific drug delivery by means of microbial azoreduction and the last presentation of the day was by Dr. Saghir Akhtar who discussed the cellular delivery of antisense and ribozyme nucleic acids. The meeting was considered a great success and attendees looked forward to the next meeting.

## **2nd UKCRS Meeting on "Controlled Drug Delivery - Current Perspectives and Future Horizons"**

The next UKCRS meeting will be held on Monday 8th January 1996 at The School of Pharmacy, University of London. Further details of the meeting will be circulated later in the year and also on the UKCRS Web page.

### **About The Controlled Release Society**

#### **Introduction**

The Controlled Release Society (CRS) is an international organization with headquarters in the Chicago area and a European Office in Geneva, Switzerland, which serves 2,400 members from more than 45 countries. Two-thirds of the CRS membership represent industry, and one-third represents academia and government.

#### **Mission**

The mission of the CRS is to advance the science and technology of chemical and biological delivery systems.

#### **Background**

Efforts to use materials to regulate the spatial and temporal release of substances for agricultural, veterinary, cosmetic, medicinal and household applications are probably as old as mankind. The modern era of controlled release can be traced to the development of the first commercially successful oral sustained-release products in the late 1940s and early 1950s, and to the development of controlled release of marine antifoulants from rubber in the 1950s. It was in this latter field, and in other agrochemical applications, that the CRS was conceived in 1973. Five years later, the CRS was incorporated as a "not-for-profit organization", devoted to the advancement of the science and technology of controlled release. Interest in controlled release has grown and broadened in scope ever since, due to the realization of the economic, therapeutic, and social benefits that can be derived from controlled release technology. A clear understanding of the "added value" of controlled release is crucial for all parties involved in human and animal health care and other applications.

#### **Science**

Controlled release is the field of scientific activity concerned with the control, in time and space, of the biological effects of therapeutic agents in human and animal health, and of other active agents in environmental, consumer, and industrial applications. The objective may be to prolong the duration of action of an active agent, to minimize adverse reactions, or to maximize efficacy. This objective may be achieved by control of diffusion, reaction rates, or other physicochemical parameters through the use of rate-controlling materials, or manipulation of the fate of the agent once beyond these barriers. Controlled release draws upon the expertise of many disciplines: chemistry, chemical engineering, pharmaceuticals, physics, materials science, as well as the biological sciences - biochemistry, biophysics, molecular biology, physiology, cell biology, medicine, etc. Newer approaches such as gene therapy are being addressed as other forms of controlled release.

The science of controlled release has become a research discipline whose future depends on a thorough understanding of the interactions between the delivery system and the biological barriers to delivery of active substances.

## **Activities**

- Sponsorship of annual symposia
- Sponsorship of workshops/short courses
- Publication of the *CRS Newsletter*
- Promotion of education
- Promotion of student and local chapters
- Administrative support for the *Journal of Controlled Release*
- Advocacy in regulatory affairs
- Graduate Student Travel Grant Lottery

## **Awards**

CRS has established several prestigious awards to recognize outstanding achievements in controlled release. They include:

- CRS Founders Award
- CRS Young investigator Research Achievement Award
- CRS-Cygnus Graduate Student Award for Outstanding Work in Drug Delivery
- CRS-Dow Corning Graduate Student Outstanding Research Award
- CRS-Merck Award for the Outstanding Paper in the Agrochemical/Veterinary Field
- CRS-3M Pharmaceuticals Graduate Student Outstanding Research Award in Drug Delivery
- CRS Outstanding Pharmaceutical Paper Award
- *Journal of Controlled Release* Outstanding Paper Award

## **Publications**

The *Journal of Controlled Release*, published by Elsevier Science Publishers, is the official journal of the CRS and is available to members at a greatly reduced rate. The Society publishes the proceedings of the annual symposia, workshop notebooks, and the *CRS Newsletter*. Please contact the Administrative Headquarters for an order form listing the publications available for sale.

## **Annual Symposia**

The annual symposium of CRS is held in late spring/early summer in various locations in the United States, Canada, Europe, and Japan.

The annual symposium provides an excellent opportunity for those interested in controlled release to meet colleagues, both academic and industrial, and exchange information. The meeting includes two or three plenary lectures and several topical symposia directed by invited speakers. Contributed papers on a broad range of topics are presented via simultaneous sessions in either podium or poster format. The scope of papers spans the fundamentals of controlled release technologies, new design concepts, clinical and biological effects, applications of controlled release, and mathematical modelling. All submissions are peer-reviewed.

## **Annual CRS Symposia Dates**

July 30 - August 4, 1995, Seattle, Washington, USA, *22nd International Symposium on Controlled Release of Bioactive Materials*.

July 7 - 12, 1996, Kyoto, Japan, *23rd International Symposium on Controlled Release of Bioactive Materials*.

## Other CRS Meetings

August 25 - 26, 1995, Stockholm, Sweden, *Optimizing Therapy Using Controlled Release Products Symposium*.

September 20 - 22, 1995, Dublin, Ireland, *CRS Ireland: Special Symposium on Current Topics in Peptide Delivery*.

September 25 - 27, 1995, Santiago, Spain, CRS Spanish-Portugese Local Chapter, *First Spanish-Portugese Conference on Controlled Drug Delivery*.

December 17 - 22, 1995, Maui, Hawaii, USA, *Third US - Japan Symposium on Drug Delivery Systems*.

August 19 - 22, 1996, Baltimore, Maryland, USA, *Conference on Advances in Controlled Drug Delivery*

Information on these and other conferences relevant to the field of controlled release may be found on the PharmWeb pages on the Internet at the following URL:

<http://www.mcc.ac.uk/pharmweb/conferences.html>

## Joining the CRS

If you would like to join the Controlled Release Society please fill in the application form enclosed with this newsletter. Alternatively, you can contact the CRS at the address below.

## Contacting the CRS

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## Contacting the UKCRS

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