Dr Norman Billingham, Reader in Chemistry has won the Royal Society of Chemistry’s 1994 Industrial Award for Macromolecules and Polymers, sponsored by Courtaulds plc. The award will be made at a ceremony on Wednesday 7 June (as Bulletin goes to press) at Burlington House, home of the Society.

Dr Billingham’s award recognises his outstanding work on polymer breakdown, stabilisation and synthesis. Most plastics and rubber break down in use due to reactions with oxygen. Stabilising them is a major problem. Most polymers glow faintly when they are heated in air, due to the reactions that break them up. The light is so weak that it can only be seen with ultra-sensitive cameras, but a pair of nylon tights has a faint blue glow at about 190°C! This ‘chemiluminescence’ is the same reaction that makes fireflies glow and Norman Billingham’s group have set out to find out why it happens to plastics and how it might be used to predict their lifetimes.

Using a novel imaging technique they have shown how the glow, and therefore the degeneration, spreads through the material as if from one apple to another in a barrel. Polymers that have been irradiated glow red. The new technique indicates how far a material has reacted and it might be used to optimise the curing process for composites like epoxy resins.

On another project Norman Billingham is developing new, environmentally friendly polyvinyl alcohols that are water-soluble, unlike most polymers. By attaching two polymer chains together, only one of which dissolves in water, his group has found new routes to ‘polymer micelles’, where the soluble tails of the chains keep the otherwise insoluble heads dissolved. These polymers might be applied to paints and ceramics, where environmental pressure calls for replacing the organic solvents with water.

Conventional emulsion paints contain agents that suspend an insoluble mixture of polymer, dyes and fillers in water: as the paint dries the volatile agent evaporates. Norman Billingham’s new polymers can be used to make water-based paint in which this agent is replaced by a polymer that forms part of the final paint film.

"The environmental implications of our research make it an enormously satisfying area in which to work," says Billingham, "the degradation studies have many implications for better use of plastics, and the driving force for much of our synthetic work is more environmentally-friendly products. That satisfaction is doubled by the recognition this award represents. It is a marvellous tribute to the work done at Sussex and the generation of students and co-workers who have made it possible."
**LETTERS**

Dear Editor,

When I rule the world, I have often thought that after the humane extermination of all dogs and cats other than a breeding stock of guide dogs for the blind, my second great boon to humanity will be the abolition of all street lighting and prohibition of external artificial lighting on private property.

We shall enjoy the beauty of the night sky again, as we did when I was young; cars will drive at night by the illumination of their own headlights, and if they have to travel a bit slower in consequence, so much the better.

I am sorry to infer, from the ominous poles now being installed about the campus, that the University is moving in the wrong direction. Next winter, it seems, we shall be inhabiting a visual environment reminiscent of a prison camp. I have instructed my commissars that, after the inauguration of Geoffrey the Good, the University of Sussex is to be an early case for treatment.

Geoffrey Sampson
Subject Chairman, CSAI

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**News**

**What the papers say**

National Lottery expert and MAPS statistician John Haigh explained why Lottery punters may be missing the jackpot in *The Sunday Telegraph* (June 4). "The numbers conform to every reasonable test of randomness I have put them through," he said. "But while the numbers coming out of the machine may be behaving to expectation, punters seem to have a misplaced sense of what that behaviour should be." Particularly fallacious is the notion that 'random' means 'evenly spread', he claims. Instead, the chances of numbers 'bunching' into groups is far higher than most people think, but his ultimate advice is more prosaic: "Buy premium bonds - they're a better bet."

Writing in *The Times* (29 May), John Postgate Emeritus Professor of Microbiology, considers whether an amber entrapped pre-historic bee discovered by American scientists may contain clues to the secrets of life. He asks if the spores discovered within the dead bee are really remnants of bacteria from inside the 25-40 million year-old insect, rather than modern descendants of the original bacteria. If this is the case, he claims that the possibility of dormant bacterial spores from Earth being swept onto other planets must be considered. "Reversing that thought, could life on this planet be descended from alien spores?"

**SCR FORTIES EVENING** 23 June, SCR, 7.30-11.00pm

The President and Committee of the Senior Common Room invite you to an informal Social Evening with a Forties flavour on Friday 23 June at 7.30 pm in the SCR (top floor, Refectory Building). There will be music from the forties, and Dorothy Sheridan of the Mass Observation Archive will give an illustrated talk "Life through Mass Observation in the 1940s." A buffet supper will be served and there will be a cash bar. Come and round off the academic year with a little nostalgia! Tickets (£8, including food) can be obtained by Friday 16 June, from Dr E.O. Bishop, MOLS, ext 3255.

**Library Archives hit the jackpot**

The Library has recently been awarded £99,332 by the Higher Education Funding Council to improve access to its unique collection of manuscripts and to the Mass Observation Archive. It is one of the first grants made available for research into the humanities through special collections.

The grant, to be spent between October 1995 and September 1998, will provide for additional clerical support and the appointment of a new staff member with specialist knowledge of the electronic development of archives. The aim is to promote the University's collections worldwide by mounting guides and handlists on the Internet. The extra staff will also make it possible to improve services to research visitors and to extend the reading room opening hours from four days a week to five.

Dorothy Sheridan, Mass Observation Archivist, said "We had to do everything to get this funding, but it was worth it. Our archives are like laboratories for historians and this money will enable us to move into new and exciting areas of mapping the collections electronically."

According to Manuscripts Librarian Bet Inglis, immediate benefits will include faster and more flexible searching facilities, and a nationwide increase in awareness of the collections. But they won't be transcribing the entire contents of the archives onto the Internet just yet. "That would be a mammoth task with untold copyright complications. The time when researchers can do all their work without leaving their desks is still some way off."

One of the Kipling manuscripts in the Library collection - an illustration accompanying a letter to his son

The Mass Observation Archive and Manuscript section will be closed to research visitors from 1 July to end of September due to building work in adjacent courtyard.
MEDICAL LAW –
A QUESTION OF ETHICS?

DOCTORS AND LAWYERS found they had a lot in common at this year’s Wynne Baxter Godfree Law Lecture “The Emergence of Medical Law”. The lecture was given by Ian Kennedy, Professor of Medical Law and Ethics at King’s College, London. An eminent speaker in this developing area of the law, Professor Kennedy posed a number of questions facing today’s doctors including the ethics of research on human guinea pigs, mistakes made by surgeons and the standards expected of trainees in the medical profession.

He said “It is often the cry of the medical profession to be left in peace to get on with their work. However, it is the law rather than medicine that has to answer these questions, because the law of the land licences the medical practitioner to engage in his profession.”

This was the fifth in a series of law lectures organised by the Centre for Legal Studies and sponsored by Wynne Baxter Godfree, the Sussex-based firm of solicitors.

ACRONYMS

Anyone who has been at the University for even a short time quickly realises that Sussex thrives on acronyms. Having listed the Graduate Research Centres in a recent Bulletin, it occurred to us that there are quite a few new ones and some changes as well. So here is an updated list to go on with. If you can think of any to add, please let us know.

Acronyms specific to the University

| AFRAS | School of African and Asian Studies |
| BIOLS | School of Biological Sciences |
| CDU  | Career Development Unit |
| CCR  | Centre for Continuing Education |
| CCS  | School of Cultural and Community Studies |
| CDE  | Centre for the Comparative Study of Culture, Development and the Environment |
| CLS  | Centre for Legal Studies |
| CMU  | Cell Mutation Unit |
| COGS | School of Cognitive and Computing Sciences |
| CRPC | Centre for Research into Perception and Cognition |
| CulCom | Graduate Research Centre in Culture and Communication |
| EAM | School of English and American Studies |
| EDB | Education Development Building |
| EHE | Enterprise in Higher Education |
| ENGG | School of Engineering |
| EURO | School of European Studies |
| GRCSS | Graduate Research Centre in the Social Sciences |
| HUMS | Graduate Research Centre for the Humanities |
| IDS | Institute of Development Studies |
| IES | Institute of Employment Studies (formerly IMS) |
| IRC | Interdisciplinary Research Centre |
| JMU | Joint Marketing Unit |
| MAPS | School of Mathematical and Physical Sciences |

Others in general use

| MOLS | School of Chemistry & Molecular Sciences |
| SEI | Sussex European Institute |
| SJC | School Joint Committee |
| SOC | School of Social Sciences |
| SPRU | Science Policy Research Unit |
| TCMR | Trafford Centre for Medical Research |
| USIE | University of Sussex Institute of Education (formerly ICAPE) |
| USIS | University of Sussex Information Service |

IMI AEROSPACE MANUFACTURE PROGRAMME: focussing on the virtual factory; product introduction process; agile manufacturing/jig-less assembly; avionics and equipment manufacture; supply chain. Closing date 21 July 1995.

CONSTRUCTION AS A MANUFACTURING PROCESS: IMI programme focussing on: increasing value for money for clients; reducing costs; increase competitiveness and shorten project delivery times; delivering completed projects and 4 research themes on research activity in the programme. Closing date 16 June 1995.

THE GRADUATE RESEARCH Centre in Culture and Communications (CulCom) has launched a new series of Research Papers. The first four volumes, edited by James Donald and Stephanie Donald, all focus on Media and Cultural Studies. The titles are Identity, Authority and Democracy, British Cinema and National Identity, Studies in Radio History, and The City, the Cinema: Modern Spaces. Among the authors are Pam Cook, Stuart Hall, Andrew Higson, Laura Marcus, Chantal Mouffe, Kevin Robins, Renata Salecl, Eric Santner, Paddy Scannell, and Bill Schwarz. For more information, phone 8261.
Monday 12 June — Sunday 18 June

4pm Sussex Centre for Neuroscience Special Seminar: Sign Language Studies of Cross-Fostered Chimpanzees. Prof. A. Gardner (Nebraska), Biology Lecture Theatre.

Cinema at the Gardner

Wednesday 14 June

11.30pm The Blues Brothers (18).

Friday 16 June

11.30pm Interview With The Vampire (18).

Sunday 18 June

6pm Heavenly Creatures (15)

9pm Dazed and Confused (15)

Tickets: £2.70 (£2.20 for Sussex students).

Lunchtime Recitals

Meeting House

1.20pm Charles Macdonald (piano), Tue 13 June, Meeting House Chapel.

Sussex University Music Faculty

1.15pm Vicky Smallwood (voice), Marcus Brittan (horn) & Catherine Stevens (violin), Thur 15 June, Palmer House Recital Room 120.

Admission free for both events. All welcome.

University Choir & C20th Ensemble

Music of Our Century

Sussex University Chamber Choir and Sussex University C20th Ensemble perform three works: Igor Stravinsky - Mass; Steve Reich - Eight Lines; Olivier Messiaen - Quatuor for the End of Time. Friday 16 June, 7.45pm, Meeting House. £2.50/E£1.50.

AUA Information

Association of University Administrators (AUA)

Did you know that:

- the AUA is the only professional organisation for University administrative and clerical staff - it has about 3,000 members nationwide.
- Sussex has 36 members
- regular events are organised with University of Brighton members - recent events include sessions on team building, academic management, equal opportunities as well as social events.
- members can attend the three-day annual conference which attracts about 1,400 delegates.
- members receive newsletters, briefing papers and Good Practice Guides.
- national training events are organised by the AUA.

Why not join us and find out more? Contact Philip Baker on ext. 3826 or email P.A.Baker@sussex.ac.uk.

National Bike Week Cycle Ride

SCRAMM/Bicycles Event 15 June

Cycle ride on Thursday 15 June to coincide with National Bike Week (10-18 June) and SCRAMM (South Coast Rambles Against Megaroad Madness). Depart Brighton Station 5.45pm, arrive Lewes around 6.30pm. Join ride at Cockcroft (6pm) or at the bridge over Palmer interchange (6.15pm). Contact Stephen Eglen on ext. 2404 for further details.

Save the Downs?

Public discussion on environmental implications of proposed Downland sell-off. 12.45pm, 14 June, Biology Lecture Theatre. All welcome.

Small Ads

FOR SALE: Panasonic W1030 portable word processor. 3.5” floppy disk drive. MS-DOS file conversion. 14 line LCD display, spell-check and thesaurus. 71mb memory. With instructions and new ribbon cassette. £200 one. Contact Claire ext. 3835.

FOR SALE: 386 notebook computer. Includes battery charger, case, manuals, DOS & Windows. VGC, £499. Contact Jamie on 670736.

FOR SALE: Sony TCM 308 cassette player. Similar to dictaphone but with many extras. £50. Contact Jamie on 670736.

FOR SALE: Exercise bench. Pristine condition, genuine reason for sale. £20. Contact Terry on ext. 8208.

FOR SALE: Pentax Espio zoom camera. £179 new, 2 years old, boxed. £100. Contact ext. 2010.

FOR SALE: Kneeboard desk, mahogany, leather top. 4’ x 2’6”. Slightly marked, £40. Contact ext. 2010.

FOR SALE: Ford Fiesta Dash. 957cc, Creg, 78,000 miles, red, sunroof, many new parts. V. reliable. £1095 ono. Contact Sue on ext. 8350 or 82661 (eves).

TO LET: Large single room in Lewes. £45p inc. Mature female non-smoker pref. Poss. short let. Contact ext. 4264 or 477319.

DO YOU: Want to work in Corfu over the Summer? Teaching English to 13-year old girl, and some light house work for French/Canadia/Czecky family. Contact Pauline on ext. 8209 for details.

WANTED: Acoustic guitar. Contact Marilyn on ext. 8175.

WANTED: Flat to purchase in London around £50,000. Contact ext. 8229.

WANTED: 2 bed flat or house for visiting Japanese scientist and family. 20 Jul - 1 Oct. Contact Michael Green on ext. 8120/8123.

WANTED: 300 extras for a performance of Cavalcade at the Theatre Royal (early July). Unpaid. Contact Pappa Godfrey at the King’s Head on 0171 226 1916 for details.

Bulletin

The Bulletin appears on Fridays with copy deadline the preceding Friday. Please send contributions to the Information Office, Sussex House on ext. 8209 or email: Bulletin@sussex.ac.uk.
Staff Open Day - July 19th 1995

The Staff Development Office, with considerable help from friends, is organising an informal Staff Open Day on July 19th 1995.

The aim of this day is to open up the University to those who work here. Ever wondered what happens in the Refectory? Ever wanted to visit the Sports centre but haven't found the time? Ever wanted to meet the people you speak to, but don't know how to find them? Ever wanted to see where students live and where they study. Ever wanted to cross the Arts/Science divide, visit the Library, check out a lecture theatre, find out about the inside of the boiler house?

This is your chance!!!

On July 19th 1995 a variety of exhibitions, tours, visits, events is planned. People from all over the university have agreed to participate; to open their doors, tell us what they do and to show us some of the important parts and work of the University which often go unnoticed, but we hope not unappreciated.

This is an opportunity to explore parts of the campus, to meet people and to share the experience of others who work here. The events will take place throughout the day and the evening and we hope to provide something of interest for everybody. We aim to celebrate the University and its Staff and to have some fun.

There is no ideal time to hold such an event and we realise that work will have to continue. We hope that this day will be informal and that section and unit heads will be able to give most people a chance to sample some of the events. This is a trial run and if successful, we hope to be able to repeat this in the future. When we have finalised the list of events, we shall publish a programme for the day; some events will need to be pre-booked (on a first come, first served basis). If you are interested, make a note of the date and watch out for the programme and posters.

These are some of the things offered so far for you to try.

Have your colour vision tested
Take part in sporting events - serious or not
Join the campus treasure hunt.
Take tea on the lawns by Sussex House
Visit student residences
Watch a robotics demonstration
Try some sports centre activities
Observe the Rescue Team in action
Test yourself with the acronym quiz
Visit exhibitions of plans for the University
See what some of the University Units actually do
Find out what an electron Microscope can do

Join the campus ecology walk
Visit the library collections
See the new technology in action
Find out what CCE has to offer
Check out the Photographic Studio
See the particle accelerator
Tour the Estates Buildings/workshops
Try "computing for absolute beginners"
Visit the Television Studio
Explore the Boiler House
See the Refectory kitchens in action
Visit BIOLS greenhouses

This is not the final list, watch out for the programme. If you have a good idea and can help with the day please complete the form on the back of this page and return it to us.
Staff Open Day - July 19 1995

If you have an idea or wish to offer to help, and haven't already contacted us, will you please complete and return this form, so that we can produce a programme for the Open Day.

Organiser(s):   Tel:

Event title and brief description:

Location/Meeting Point:

Preferred Time: (s)

Duration:

Total numbers possible:

Advance Booking necessary: YES/NO If YES last date for booking

Any Special Instructions (e.g clothing etc.)

Help Required

If you need to discuss this please phone Rose Mortenson ext. 8642, Alison Lyner ext 3868 or Andrew Hood ext 3849

Please return to Alison Lyner Sussex House Room 209 as soon as possible, and we'll try to include your idea.

odconf.doc