Commitment to Teaching

The School has a significant commitment to postgraduate training. In 1999 we had a total of 78 PhD students, including continuing students and those completing their thesis. A total of 12 postgraduate students commenced their program of study during the year and of those six are women; in fact, one third of postgraduate students formally enrolled in the School are women.

The School, in co-operation with the ANU Graduate School, organized various activities aimed at assisting the postgraduate students and broadening their education. An introductory seminar for new students was given and various tours were conducted of the School facilities and the Department of Physics, The Faculties. The students also met at several social functions.

On Founders Day in October the School introduced two new student prizes:

• The inaugural biennial presentation of the Jagadishwar Mahanty Prize for the best PhD thesis. The Prize is given in memory of Jay Mahanty, a former member of the Department of Theoretical Physics. The winner was — Dr Elena Ostrovskaya of the Optical Sciences Centre for her thesis entitled \textit{Optical Vector Solitons}.

• To complement the Mahanty Prize, The Director’s Award was initiated for the most outstanding published research paper by a PhD student over the last year. For his paper entitled \textit{Kinetics of Capillary Condensation in a Nanoscale Pore} (with N. Maeda and H. Christenson) the winner was — Marcus Kohonen, Department of Applied Mathematics.

The Graduate Program in Physical Sciences ran its seminar competition for the sixth year. Ten talks were presented by postgraduates from this School, The Faculties and the Australian Defence Force Academy, with the sessions chaired by the postgraduates. The winners were announced at the conclusions of the program and the prizes were presented at Founder’s Day.

The winner of the 1999 John Carver Prize for the best seminar by a postgraduate student — Daniel Shaddock, Department of Physics, The Faculties.

The winner of the Director’s Prize from best experimental seminar — Wayne Solomon, Plasma Research Laboratories.

The winner of the Dean’s Prize for the best theoretical seminar — Keith Gaff, Optical Sciences Centre.

The School also makes a significant contribution to undergraduate education by offering a broader range of courses to enrich the undergraduate teaching program. These courses are offered in The Faculties, in the Physics, Engineering and Chemistry Departments. Also, to provide wider opportunities for ANU undergraduates at research level, the School has in recent years offered honours projects and many undergraduates have taken up this opportunity. The School supports this program by offering honours year scholarships of which there were five in the current year. It was also pleasing to note that four students who held scholarships in 1998 have continued and enrolled as PhD students in the School in 1999.
Degrees Awarded and Destinations

Atomic and Molecular Physics Laboratories

Dr D.T. Alle
Currently: IP Australia, Canberra

Dr D. Milic
Thesis: Laser Cooling and Trapping of Metastable Helium
Currently: Therapeutic Goods Administration, Canberra

Dr J.C. Gibson
Thesis: Electron Scattering from Ar, Xe, CO and CO₂
Currently: Department of Defence, Salisbury, SA

Dr P.C. Palma
Thesis: Laser-Induced Fluorescence Imaging in Free-Piston Shock Tunnels
Currently: Institute of Fluid Mechanics, German Aerospace Centre, Goettingen, Germany

Dr J.P. Sullivan
Thesis: Negative ion resonances in magnesium and cadmium
Currently: Physics Department, University of California at San Diego, USA

Electronic Materials Engineering

Dr Z. Li
Thesis: Formation of Silicon Based Ceramics by Mechanochemistry and Ion Implantation
Currently: Singapore

Dr J. Glasko
Thesis: Ion Beam Processing of Ge₁₋ₓ Siₓ Strained Layers
Currently: NC State University, USA

Dr Jennifer Gibson undertaking experiments during the completion of her PhD
<table>
<thead>
<tr>
<th><strong>Laser Physics Centre</strong></th>
<th><strong>Optical Sciences Centre</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dr D. Body</strong></td>
<td><strong>Dr E. Ostrovskaya</strong></td>
</tr>
<tr>
<td>Thesis: <em>An Investigation into Passive Modelocking Using a Nonlinear Directional Coupler</em></td>
<td>Thesis: <em>Optical Vector Solitons</em></td>
</tr>
<tr>
<td>Currently: CRC for New Technologies for Power Generation from Low Rank Coal</td>
<td>Currently: Visiting Fellow, Optical Sciences Centre</td>
</tr>
<tr>
<td><strong>Dr J. Christou</strong></td>
<td><strong>Dr A. Degeling</strong></td>
</tr>
<tr>
<td>Currently: Australian Defence Industries</td>
<td>Currently: CRPP, Lausanne, Switzerland</td>
</tr>
<tr>
<td><strong>Dr H. Giordano</strong></td>
<td><strong>Dr R. Ellem</strong></td>
</tr>
<tr>
<td>Currently: Commonwealth Superannuation Administration</td>
<td>Currently: Maritime Operations Division, Defence Science and Technology Organisation, South Australia</td>
</tr>
<tr>
<td><strong>Dr M.J. Lederer</strong></td>
<td><strong>Dr B. Stenlake</strong></td>
</tr>
<tr>
<td>Currently: ARC Fellow, Laser Physics Centre</td>
<td>Currently: Wizard Computing</td>
</tr>
<tr>
<td><strong>Dr B. Stenlake</strong></td>
<td><strong>Dr W. Yu</strong></td>
</tr>
<tr>
<td>Thesis: <em>Experimental Investigation of the Reflection of Thermal Sodium Atoms from a Moving Evanescent Grating</em></td>
<td>Thesis: <em>Applications of the Photorefractive Effect in Mutally Pumped Phase Conjugators and Planar Waveguides</em></td>
</tr>
<tr>
<td>Currently: Wizard Computing</td>
<td>Currently: Electro Optic Systems</td>
</tr>
<tr>
<td><strong>Dr W. Yu</strong></td>
<td><strong>Theoretical Physics</strong></td>
</tr>
<tr>
<td>Thesis: <em>Applications of the Photorefractive Effect in Mutally Pumped Phase Conjugators and Planar Waveguides</em></td>
<td></td>
</tr>
<tr>
<td>Currently: Electro Optic Systems</td>
<td></td>
</tr>
</tbody>
</table>

*Dr Elena Ostrovskaya, receives the inaugural Jagadishwar Mahanty Prize for her PhD thesis, from Emeritus Professor Ken Le Couteur, founding head of Theoretical Physics*
# Postgraduate Students

## Sources of Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADCOS</td>
<td>Australian Development Co-operation Scholarship</td>
</tr>
<tr>
<td>ADFA</td>
<td>Australian Defence Force Academy</td>
</tr>
<tr>
<td>ANUPS</td>
<td>Australian National University Postgraduate Scholarship</td>
</tr>
<tr>
<td>ANUPTS</td>
<td>Australian National University Postgraduate and Tuition Fee Scholarship</td>
</tr>
<tr>
<td>ANUTECH</td>
<td>Supported by ANUTECH</td>
</tr>
<tr>
<td>APA</td>
<td>Australian Postgraduate Award</td>
</tr>
<tr>
<td>APA(I)</td>
<td>Australian Postgraduate Award (Industry)</td>
</tr>
<tr>
<td>ATERB</td>
<td>Australian Telecommunications and Electronics Research Board Award</td>
</tr>
<tr>
<td>CRC</td>
<td>Cooperative Research Centre</td>
</tr>
<tr>
<td>CSFP</td>
<td>Commonwealth Scholarship and Fellowship Plan</td>
</tr>
<tr>
<td>ERDC</td>
<td>Energy Research and Development Corporation</td>
</tr>
<tr>
<td>GIRD</td>
<td>Generic Industrial Research and Development</td>
</tr>
<tr>
<td>GSS</td>
<td>Graduate School Scholarship</td>
</tr>
<tr>
<td>IPRS</td>
<td>Overseas Postgraduate Research Scholarship</td>
</tr>
<tr>
<td>RMIT</td>
<td>Royal Melbourne Institute of Technology</td>
</tr>
<tr>
<td>VC</td>
<td>Vice Chancellor’s Supplementary Scholarship</td>
</tr>
</tbody>
</table>

The lists include students who were not enrolled for the full year, or who had completed their course but not yet submitted their thesis.

## Applied Mathematics

<table>
<thead>
<tr>
<th>Name</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms J. Bright</td>
<td>BSc Sydney APA</td>
</tr>
<tr>
<td>Mr M.M. Kohonen</td>
<td>BSc APA</td>
</tr>
<tr>
<td>Mr N. Maeda</td>
<td>BEng Tohoku, Japan, MSc JAIST, Japan</td>
</tr>
<tr>
<td>Ms Y. Qiao</td>
<td>BSc Sichuan, China, MSc Ancona, Italy IPRS/ANUPS</td>
</tr>
<tr>
<td>Mr M. Schmidt</td>
<td>MSc ANUPTS (jointly with EME)</td>
</tr>
</tbody>
</table>

## Atomic and Molecular Physics Laboratories

<table>
<thead>
<tr>
<th>Name</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr M. Arifin</td>
<td>BSc IKIP Bandung, Indonesian Government</td>
</tr>
<tr>
<td>Mr M. Colla</td>
<td>MSc Pisa IPRS/ANUPS (jointly with LPC)</td>
</tr>
<tr>
<td>Mr R.G. Dall</td>
<td>BSc CQU, Hons ANU APA (jointly with LPC)</td>
</tr>
<tr>
<td>Mr A.M. Elliott</td>
<td>BSc Wollongong ANUPS</td>
</tr>
<tr>
<td>Mr W. Lu</td>
<td>BSc UNSW (jointly with LPC)</td>
</tr>
<tr>
<td>Ms D. Milic</td>
<td>MSc Belgrade (joint with LPC)</td>
</tr>
<tr>
<td>Mr A. Purwanto</td>
<td>BSc Gadjah Mada U Indonesian Govt</td>
</tr>
<tr>
<td>Mr E. Roberts</td>
<td>BSc BE UNSW, MBA Deak, FIE(Aust) APA</td>
</tr>
<tr>
<td>Mr J.A. Swansson</td>
<td>BA BSc MSc Melbourne APA (jointly with LPC)</td>
</tr>
<tr>
<td>Miss L.J. Uhlmann</td>
<td>B.App.Sci CQU, Honours ANU APA</td>
</tr>
<tr>
<td>Ms K. Waring</td>
<td>BSc Monash (jointly with LPC)</td>
</tr>
</tbody>
</table>

## Electronic Materials Engineering

<table>
<thead>
<tr>
<th>Name</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr K.B. Belay</td>
<td>BSc MSc AAU ADCOS</td>
</tr>
<tr>
<td>Ms J. Bradby</td>
<td>BApSc RMIT APA(I)</td>
</tr>
</tbody>
</table>
Ms C. Carmody, BSc UNSW APA CSIRO
Ms S. Cheylan, BSc MSc Grenoble ANUPS/IPRS (jointly with LPC)
Mr M. Cohen, BEng UQ APA
Mr P.N.K. Deenapanray, BEng ANU MSc Pretoria IPRS/ANUPS
Ms A.R. Dowd, BSc UNSW APA
Ms S. Fatima, BSc MSc Karachi ADCOS
Ms L. Fu, MSc USTC ANUPS/IPRS
Mr J.M. Glasko, BSc Ottawa MSc Western Ont ANUPS
Mr C. Glover, BSc Newcastle ANUPS
Mr C.M. Johnson, BEng ANUPS/APA(I)
Mr S.O. Kucheyev, MPh StPSTU IPRS/ANU
Mrs Z.L. Li, BEng E Chin Inst Met ANUPS
Ms C. Lobo, BSc UWA APA
Mr M. Schmidt ANUPTS (jointly with AM)
Ms T.D.M. Weijers BSc APA,VC (jointly with NP)
Mr W-C. Wong, BSc MPhil Chin U Hong Kong ANUPS
Mr X. Zhu, BEng MSc NE U Chin IPRS/ANUPS

Ms R.D. Butt, BSc APA, VC
Ms J.M. Evans, BSc ANUPS (jointly with RSES)
Mr T.R. McGoram, BSc, MSc Auckland APA
Mr M.P. Robinson, BSc Surrey, ANUPS
Ms T.D.M. Weijers, BSc APA, VC (jointly with EME)

Optical Sciences Centre

Mr T. Alexander, BSc Darwin APA
Ms S. Ashby, BSc Sydney APA(I)/AOFR Pty Ltd
Mr A. Degeling, BSc Sydney Ericsson Australia Pty Ltd (jointly with PRL)
Mr K. Gaff, BSc Mon APA(I)/AOFR Pty Ltd (jointly with PRL)
Ms R. Jarvis, BE BSc APA(I)/Siemens Ltd
Ms E. Ostrovskaya, BSc Mosc IPRS/ANUPS
Mr A. Sukhorukov, BSc Mosc IPRS/ANUPS
Ms S. Tomljenovic-Hanic, BSc Belgrade APA(I) (jointly with LPC)

Plasma Research Laboratory

Mr A. Degeling, BSc Sydney Ericsson Australia Pty Ltd (jointly with OSC)
Mr K. Gaff, BSc Mon APA(I)/AOFR Pty Ltd (jointly with OSC)
Mr F. Glass, BSc Qld ANUPS
Ms S. Hatch, BSc ENYA
Mr R. Hawkins, BE BIT ANUPS
Mr C. Michael, BSc APA
Mr H. Punzmann, BSc Polytech Regensburg ANUPS
Mr W. Solomon, BSc Qld APA
Mr J. Wach, BAppSc BCAE, GradDipElect CCAE

Ms A.C. Berriman, BSc, Grad Dip APA

Ms R. Dysley, BSc APA
Mr P. Cuthbert, BSc Monash APA
Mr G. Ericksson, BSc Qld ANUPS
Mr A. Hibberd, BSc Qld APA
Mr M. Hoyles, BSc ANUPS
Mr A.B. Khorev, DipPhys Mosc PTI IPRS/ANUPS
Ms S.S. Lloyd, BSc Murdoch APA
Mr I. McCulloch, BSc Tasmania APA
Ms S.H. Sutanto, BSc ITB Indonesia ADCOS/ANUPS
Mr P.C. Tjiang, BSc ITB Indonesia ADCOS/ANUPS
Mr M. Walker, BSc Monash GSS

Nuclear Physics

Ms S. Cheylan, BSc MSc Grenoble ANUPS/IPRS (jointly with LPC)
Mr M. Cohen, BEng UQ APA
Mr P.N.K. Deenapanray, BEng ANU MSc Pretoria IPRS/ANUPS
Ms A.R. Dowd, BSc UNSW APA
Ms S. Fatima, BSc MSc Karachi ADCOS
Ms L. Fu, MSc USTC ANUPS/IPRS
Mr J.M. Glasko, BSc Ottawa MSc Western Ont ANUPS
Mr C. Glover, BSc Newcastle ANUPS
Mr C.M. Johnson, BEng ANUPS/APA(I)
Mr S.O. Kucheyev, MPh StPSTU IPRS/ANU
Mrs Z.L. Li, BEng E Chin Inst Met ANUPS
Ms C. Lobo, BSc UWA APA
Mr M. Schmidt ANUPTS (jointly with AM)
Ms T.D.M. Weijers BSc APA,VC (jointly with NP)
Mr W-C. Wong, BSc MPhil Chin U Hong Kong ANUPS
Mr X. Zhu, BEng MSc NE U Chin IPRS/ANUPS

Ms S. Ashby, BSc APA(I)/AOFR Pty Ltd
Mr A. Degeling, BSc Sydney Ericsson Australia Pty Ltd (jointly with PRL)
Mr K. Gaff, BSc Mon APA(I)/AOFR Pty Ltd (jointly with PRL)
Ms R. Jarvis, BE BSc APA(I)/Siemens Ltd
Ms E. Ostrovskaya, BSc Mosc IPRS/ANUPS
Mr A. Sukhorukov, BSc Mosc IPRS/ANUPS
Ms S. Tomljenovic-Hanic, BSc Belgrade APA(I) (jointly with LPC)

Ms A.C. Berriman, BSc, Grad Dip APA

Ms R. Dysley, BSc APA
Mr P. Cuthbert, BSc Monash APA
Mr G. Ericksson, BSc Qld ANUPS
Mr A. Hibberd, BSc Qld APA
Mr M. Hoyles, BSc ANUPS
Mr A.B. Khorev, DipPhys Mosc PTI IPRS/ANUPS
Ms S.S. Lloyd, BSc Murdoch APA
Mr I. McCulloch, BSc Tasmania APA
Ms S.H. Sutanto, BSc ITB Indonesia ADCOS/ANUPS
Mr P.C. Tjiang, BSc ITB Indonesia ADCOS/ANUPS
Mr M. Walker, BSc Monash GSS
Honours Students

Mr I. Miller
Mr L.A.W. Robinson
Mr S. Jones
Mr K. Ng
Ms K. Stewart
Mr R. Heck
Ms N. Sih
Mr D. Tierney
Mr S. Chan
Mr C. Chung
Mr A. Gough
Mr K. Kwai
Mr B. Kwan
Mr A. Last
Mr T. Ng
Mr G. Bowen
Mr A. Krumm-Heller
Ms A. Potter
Mr J.A. Ringland
Ms C. Saputra
Mr A. Searle
Mr A. Venkatarama

Physics
Physics
Physics
Engineering
Engineering
Engineering
Engineering
Engineering/Science
Physics
Physics
Physics
Physics
Physics
Computer Science
Engineering (until July)
Physics
Engineering
Physics
Physics

AM
AMPL/LPC
EME/NP
EME
EME
LPC/AMPL
LPC/AMPL
LPC/AMPL
Physics
Physics
Physics
Physics
Physics

Tam

Summer Scholars

The Summer Scholars from December 1999 to January 2000 were:

Mr A. Daley
Mr M.D. Fraser
Mr D.R. Sypher
Mr X. Gisz
Mr M. Leaver
Ms T. Martin
Ms B. Taylor
Mr R. Nielson
Ms C. Low
Ms C. Bellair
Mr D. Blake
Mr B. McMillan
Mr N. Whitlock
Ms J. McCabe

Auckland University, NZ
Griffith University
University of Queensland
Australian National University
Australian National University
Australian National University
Macquarie University
University of Auckland, NZ
University of Canterbury, NZ
University of Melbourne
James Cook University
University of Melbourne
University of Queensland
Monash University

AMPL
EME
EME
LPC
LPC
LPC
LPC
NP
NP
OSC
PRL
PRL
PRL

The following students received Departmental Summer Scholarships:

Mr A. Gough
Mr P. Linardakis
Mr D. Price
Mr L. Robinson

Australian National University
Australian National University
Australian National University
Australian National University

PRL
PRL
PRL
PRL

The students toured the School and the Department of Physics and Theoretical Physics in The Faculties, and also visited the Research School of Astronomy and Astrophysics at Mount Stromlo. Students gave short presentations on the projects they had undertaken at a seminar held near the end of their stay.
### Winter Scholars

For the first time Winter Scholarships were offered and the following students spent periods of up to three weeks in the Research School during the July to August vacation, working in various departments on topics of their choice:

<table>
<thead>
<tr>
<th>Name</th>
<th>University</th>
<th>AM/EMPL/TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms J. Wood</td>
<td>Australian National University</td>
<td>AM</td>
</tr>
<tr>
<td>Mr A. Jones</td>
<td>Australian National University</td>
<td>AM</td>
</tr>
<tr>
<td>Mr B. Sheard</td>
<td>Australian National University</td>
<td>AMPL</td>
</tr>
<tr>
<td>Mr H. Seveviratne</td>
<td>Australian National University</td>
<td>EME</td>
</tr>
<tr>
<td>Mr B. Casack</td>
<td>Australian National University</td>
<td>LPC</td>
</tr>
<tr>
<td>Mr R. May</td>
<td>Australian National University</td>
<td>LPC</td>
</tr>
<tr>
<td>Mr A. Milkajloveski</td>
<td>Australian National University</td>
<td>LPC</td>
</tr>
<tr>
<td>Ms K. Stewart</td>
<td>Australian National University</td>
<td>OSC</td>
</tr>
<tr>
<td>Mr K. Fairburn</td>
<td>University of New South Wales</td>
<td>TP</td>
</tr>
<tr>
<td>Ms P. Louis</td>
<td>Australian National University</td>
<td>TP</td>
</tr>
</tbody>
</table>

### Visiting Scholars

The following undergraduate and postgraduate scholars spent time in the School for the purpose of training and research:

<table>
<thead>
<tr>
<th>Name</th>
<th>University</th>
<th>AM/EMPL/TP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms A. Barisic</td>
<td>Physics, Zagreb</td>
<td>AM</td>
</tr>
<tr>
<td>Ms B. Folmer</td>
<td>YKI, Stockholm</td>
<td>AM</td>
</tr>
<tr>
<td>Mr M. Olla</td>
<td>Chemistry, Cagliari</td>
<td>AM</td>
</tr>
<tr>
<td>Mr M. Persson</td>
<td>YKI, Stockholm</td>
<td>AM</td>
</tr>
<tr>
<td>Mr B. Schnurr</td>
<td>University of Michigan</td>
<td>AM</td>
</tr>
<tr>
<td>Mr C. Bresson</td>
<td>University of Paris, France</td>
<td>AMPL</td>
</tr>
<tr>
<td>Ms. A. Lovell</td>
<td>University of Melbourne</td>
<td>AMPL</td>
</tr>
<tr>
<td>Mr C. Meridja</td>
<td>IUP GSI of Metz, France</td>
<td>AMPL</td>
</tr>
<tr>
<td>Mr M.B. Johnston</td>
<td>University of New South Wales</td>
<td>EME</td>
</tr>
<tr>
<td>Mr J. Laird</td>
<td>University of Melbourne</td>
<td>EME</td>
</tr>
<tr>
<td>Mr M. Toth</td>
<td>UTS, Sydney</td>
<td>EME</td>
</tr>
<tr>
<td>Mr T-D. Kim</td>
<td>Hannam University, Taejon</td>
<td>LPC</td>
</tr>
<tr>
<td>Mr R. Neuhaus</td>
<td>University of Dortmund, Germany</td>
<td>LPC</td>
</tr>
<tr>
<td>Mr O-H. Park</td>
<td>Korea Advanced Institute of Science and Technology</td>
<td>LPC</td>
</tr>
<tr>
<td>Mr M. Stritzker</td>
<td>University Augsburg, Germany</td>
<td>LPC</td>
</tr>
<tr>
<td>Mr C. Weilnau</td>
<td>Darmstadt University of Technology, Germany</td>
<td>LPC</td>
</tr>
<tr>
<td>Ms D. Werner</td>
<td>FH Aalen University of Applied Sciences, Germany</td>
<td>LPC</td>
</tr>
<tr>
<td>Mr I. Boztosun</td>
<td>University of Oxford, UK</td>
<td>NP</td>
</tr>
<tr>
<td>Mr C. Bremner</td>
<td>University of Oxford, UK</td>
<td>NP</td>
</tr>
<tr>
<td>Ms R. Carling</td>
<td>Manchester University, UK</td>
<td>NP</td>
</tr>
<tr>
<td>Mr B. Greenhalgh</td>
<td>University of York, UK</td>
<td>NP</td>
</tr>
<tr>
<td>Mr P. Leask</td>
<td>University of Birmingham, UK</td>
<td>NP</td>
</tr>
<tr>
<td>Ms R.G. Liberman</td>
<td>Laboratorio Tandar, Argentina</td>
<td>NP</td>
</tr>
<tr>
<td>Mr A.A. Tulapurkar</td>
<td>Tata Institut of Fundamental Research, Mumbai, India</td>
<td>NP</td>
</tr>
<tr>
<td>Mr B. Varga</td>
<td>Loránt Eötvös University, Budapest, Hungary</td>
<td>NP</td>
</tr>
<tr>
<td>Mr M. Wharton</td>
<td>Manchester University, UK</td>
<td>NP</td>
</tr>
<tr>
<td>Mr A. Ash</td>
<td>RMIT</td>
<td>OSP</td>
</tr>
<tr>
<td>Mr. A. Carlsson</td>
<td>Chalmers University of Technology, Göteborg, Sweden</td>
<td>OSC</td>
</tr>
<tr>
<td>Mr A.M. Geisser</td>
<td>Fachhochschule Aalen, Germany</td>
<td>OSC</td>
</tr>
<tr>
<td>Mr B. Gibson</td>
<td>La Trobe</td>
<td>OSC</td>
</tr>
<tr>
<td>Mr J. Katsifolis</td>
<td>La Trobe</td>
<td>OSC</td>
</tr>
<tr>
<td>Mr K. Kolossorsk</td>
<td>Australian Defence Force Academy</td>
<td>OSC</td>
</tr>
<tr>
<td>Mr J. Malmberg</td>
<td>Chalmers University of Technology, Göteborg, Sweden</td>
<td>OSC</td>
</tr>
</tbody>
</table>
The 1999 Siemens Science and Engineering Experience, ANU, for Students entering Year 10 in 2000 was directed by Professor John Love, assisted by the treasurer, Mrs Andrea Robins from the Optical Sciences Centre, and received managerial support from the Centre for Continuing Education. The event was held from 27-29 September and attracted 81 students from the ACT and country NSW. Members of the School who helped with lectures and tours of facilities included Dr John Martin, LPC, Dr Tim Thompson, PR Unit, Ms Fu Lan, EME, and various members of the student body.

The following students, from local high schools and colleges, visited the School for work experience:

<table>
<thead>
<tr>
<th>Name</th>
<th>School/College</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr C. Martin</td>
<td>Lake Tuggeranong College</td>
<td>AM</td>
</tr>
<tr>
<td>Mr R. Grover</td>
<td>Narrabundah College</td>
<td>EME/NP</td>
</tr>
<tr>
<td>Ms C. Henry</td>
<td>Canberra College</td>
<td>LPC</td>
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<td>Mr A. Von Brasch</td>
<td>Lake Ginninderra College</td>
<td>LPC</td>
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<td>Maysam Torabi</td>
<td>Canberra College</td>
<td>LPC</td>
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<td>Mr S. Forsyth</td>
<td>Dickson College</td>
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<td>Mr C. Bloomfield</td>
<td>Dickson College</td>
<td>NP</td>
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<tr>
<td>Mr T. Hanna</td>
<td>Canberra College</td>
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<tr>
<td>Ms H. Lee</td>
<td>Canberra Girls Grammar School</td>
<td>NP*</td>
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<tr>
<td>Mr E. Mancini</td>
<td>Lake Ginninderra College</td>
<td>NP</td>
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<tr>
<td>Mr S. Rymers</td>
<td>Lake Ginninderra College</td>
<td>NP</td>
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* CSIRO sponsored student

Science Schools

Optical Sciences Centre

The 1999 Siemens Science and Engineering Experience, ANU, for Students entering Year 10 in 2000 was directed by Professor John Love, assisted by the treasurer, Mrs Andrea Robins from the Optical Sciences Centre, and received managerial support from the Centre for Continuing Education. The event was held from 27-29 September and attracted 81 students from the ACT and country NSW. Members of the School who helped with lectures and tours of facilities included Dr John Martin, LPC, Dr Tim Thompson, PR Unit, Ms Fu Lan, EME, and various members of the student body.

Theoretical Physics

Upcoming activities are the 13th Physics Summer School Bose–Einstein Condensation: Atomic Physics to Quantum Liquids and the workshops The Baxter Revolution in Mathematical Physics (Canberra, Australia 3–19 February, 2000) and Soft Condensed Matter: Physical and Biological Aspects (Canberra, Australia, 16–29 October 2000).

For details regarding the ANUCTP Summer Schools see page 89.
Outreach Activities

Founder’s Day was celebrated on the 8th October with invited guests from ANU, other government organisations, industry and the media, and former employees. It is a forum for the informal presentation of science to guests, colleagues and students throughout the School. The following members of staff gave Founder’s Day talks:

Dr Christine Charles, Plasma Research Laboratory
Visualisation as a Partner in Science

Dr Adrian Sheppard, Applied Mathematics
Flow in Porous Rocks: From Food Stains to Nuclear Waste

Professor Trevor Ophel, Nuclear Physics
Some Foils Ain’t Foils

Mr Ron Cruikshank, Research Services and Dr Nikoli Lobanov, Nuclear Physics
How the Technology of Wire Cutting Helps Surfing on Electromagnetic Waves

Ms Charlene Lobo, Electronic Materials Engineering
From Dots to Devices

Dr Andrei Rode, Laser Physics Centre
Ultrafast Laser Ablation

Mr Ben Corry, Theoretical Physics
Physics of Biological Ion Channels

Dr Darran Edmundson, Optical Sciences Centre
Dynamics of Incoherent Solitons

Dr Maarten Vos, Atomic and Molecular Physics Laboratories
Electrons: How (Fast) Are You Going?

Rio Tinto National Youth Science Forum. The Forum provides a unique experience for Year 11 students (some 278 in total) to visit the School and meet with leading scientists and tour the laboratories and major national research facilities. Professor Crompton, AMPL, has been Chairman of the Board since 1996 and Dr Malcolm McIntosh, CSIRO, is President. The School’s involvement is coordinated by Ms Laura Walmsley, EME. The Forum runs in two sessions from 2-16th and 16-30th January, and tours are conducted by Dr Tim Thompson, PR Unit. Further details can be obtained from this web address: http://www.anu.edu.au/nysf/
The Australian Institute of Physics, "Adopt-a-Physicist" Program. Dr Ken Baldwin of LPC was an organiser and Dr Rob Elliman is the co-ordinator (northern region) of the ACT Australian Institute of Physics "Adopt-a-Physicist" Program for ACT Secondary College students. Drs Aidan Byrne and Nanda Dasgupta, NP, were participants, and Ms A. Dowd, EME, presented a talk: Physics of Musical Instruments to various high schools as part of the above program.


The 1999 Siemens Sciences and Engineering Experience ANU was conducted for students entering Year 10 in 2000. The program is coordinated by Professor John Love, OSC, – see Science Schools, Section 2 for further details. Dr John Martin, LPC, Dr Tim Thompson, PR Unit, Ms Fu Lan, EME, and a variety of student helpers are acknowledged.

Dr Rob Elliman of EME gave a lecture to Canberra Institute of Technology students on The Application of Electron Microscopy on Electronic Materials.

WEDGING. Professor R.W. Boswell and Mr P. Alexander participated in setting up the WEDGE virtual reality theatre at the Powerhouse Museum Universal Machine exhibition in June (along with Mr Drew Whitehouse of ANUSF). The exhibition, and especially the WEDGE, has been a great success with queues of about twenty children every day waiting to use it. They are also helping the CSIRO Discovery Centre to design their new exhibition using a WEDGE that will open in the year 2000. A portable version of the WEDGE theatre was exhibited at an international workshop at Magnetic Island, Queensland, in July, and in the Main Committee Room, Parliament House, Canberra, in October.

Demonstrations of the WEDGE were also given during the Australian Science Festival, as well as the Siemens Science and Engineering Experience, RSPhysSE Founder’s Day and as part of the COMP3067 Computational Science and Engineering lecture course.

Australian Science Festival. The School was once again a major contributor to the ANU stand at the Australian Science Festival, this year providing a display illustrating the different spectral characteristics of common household light globes. Demonstrations of the WEDGE were also given during the Festival.

The School hosted 19 Summer Scholars and 10 Winter Scholars from Australian and New Zealand Universities for periods of up to six weeks. The School supported 40 international undergraduate and postgraduate scholars who spent time in the School for the purpose of training and research. Seven ACT College students spent time in the School for the purpose of work experience. For the names and affiliations of the above mentioned student groups see Section 2 Visiting Scholars.

Drs L.K. Fifield, M.L. di Tada, G.M. dos Santos and P.A. Hausladen participated in The David Culley Award of the Australian Nuclear Association. The ANA makes an annual award to a selected secondary school with an interest in furthering its activities in nuclear-related science. The award for 1999 went to the Ecology Group at Lake Ginninderra College for the project "Historical Rates of Erosion of the Australian Landscape as Measured with Beryllium-10". Students and teachers from the College joined the AMS group during the field sampling, chemical preparation and AMS measurements. A poster describing this work was prepared by the students and presented at the 3rd Conference on Nuclear Science and Engineering in Australia, held in Canberra on 27-28 October.

Dr Tim Senden demonstrates the fundamentals of spectroscopy to Science Festival visitors