

## **The ICA and the MSIA**

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### **Introduction**

The International Cartographic Association (ICA) is “The world authoritative body for cartography, the discipline dealing with the conception, production, dissemination and study of maps.” Its mission is: “To promote the discipline and profession of cartography in an international context” (ICA, 2006). The ICA is the prime international body for Cartography and Geographic Information.

This paper firstly outlines the ICA, from its beginnings to its current-day activities. Then it describes the Australian contributions over the last three decades.

### **Beginnings and current status**

The ICA was founded on June 9, 1959, in Bern, Switzerland. This occurred after a number of preparatory conferences were held 1956 - 1959, where its foundation was discussed. In 1961 the first General Assembly (I) was held in Paris. The first President was Professor Eduard Imhof, of Switzerland (ETH, 2006), who held this position between 1961 and 1964.



Figure 1. First president of the ICA, Professor Eduard Imhof.

Source: <http://www.maps.ethz.ch/imhofN1engl.html>.

The first conference International Cartographic Conference (ICC) was held in Frankfurt am Main, Germany in 1962.

The ICA is now an International Organisation, which is reflected in the number of member countries. These are listed below:

Albania	Estonia	Madagascar	South Africa
Algeria	Finland	Malaysia	South Korea
Argentina	France	Mexico	Spain
Australia	Germany	Mongolia	Sri Lanka
Austria	Ghana	Morocco	Sudan
Belgium	Greece	Mozambique	Sweden
Benin	Guinea	The Netherlands	Switzerland
Brazil	Hong Kong	New Zealand	Tanzania
Bulgaria	Hungary	Nicaragua	Thailand
Cameroon	Iceland	Nigeria	Tunisia
Canada	India	Norway	Turkey
Chile	Indonesia	Pakistan	Ukraine
China	Iran	Panama	United Kingdom
Colombia	Ireland	Peru	United States of
Croatia	Israel	Poland	America
Cuba	Italia	Portugal	Venezuela
Cyprus	Japan	Qatar	Vietnam
Czech Republic	Jordan	Romania	Yemen
Denmark	Kenya	Russia	Yugoslavia
Ecuador	Latvia	Slovakia	
El Salvador	Lithuania	Slovenia	

The ICA has a number of aims, viz:

- To contribute to the understanding and solution of world-wide problems through the use of cartography in decision-making processes;
- To foster the international dissemination of environmental, economic, social and spatial information through mapping;
- To provide a global forum for discussion of the role and status of cartography;
- To facilitate the transfer of new cartographic technology and knowledge between nations, especially to the developing nations;
- To carry out or to promote multi-national cartographic research in order to solve scientific and applied problems;
- To enhance cartographic education in the broadest sense through publications, seminars and conferences; and
- To promote the use of professional and technical standards in cartography.

### **Operation**

The ICA operates around an Executive, which consists of a President, seven vice-Presidents, a Secretary-General and a newsletter editor. All of these positions are voluntary. The Executive is elected by popular vote at the General Assembly, which takes place every four years. The Executive is representative of the member nations, with Executive Committee members hailing from a number of countries:

- Australia - Vice President William Cartwright
- Czech Republic - President Milan Konecny
- Finland - Vice President Kirsi Virrantaus
- Kenya - Vice President Haggai Nyapola
- Russia - Vice President Vladimir Tikunov
- Spain - Vice President Ramon Lorenzo Martinez
- Sweden - Past President Bengt Rystedt
- The Netherlands - Secretary General and Treasurer Ferjan Ormeling
- United Kingdom - Vice President David Fairbairn
- United States of America - Vice President Robert McMaster

Also at the General Assembly the ICA's Commissions and Working Groups' chairs and vice-chairs are elected and their terms of reference for the following four years are approved. On some occasions extraordinary General Assemblies are held to debate and decide on pressing matters. The photograph in figure 1 show national representatives at the General Assembly held in Durban, South Africa in 2003.



Figure 1. ICA General Assembly, Durban, South Africa, 2003. Photograph: Laslo Zentai. Used with permission.

The last general Assembly was an extraordinary one. At the meeting Chile was endorsed to host the 2009 Conference to be held in Santiago. The author is pictured below with Chilean colleagues who are part of the organizing committee. The next General Assembly will take place in Moscow, Russia in 2007.



Figure 2. ICA vice-President William Cartwright with ICC 2009 Conference committee members. Santiago, Chile, 2005.

Every two years the ICA holds a conference. The 22nd International Cartographic Association Conference was held in A Coruña, northern Spain 11th – 15th July 2005. The conference was organised by the Spanish Society for Cartography, Photogrammetry and Remote Sensing. 1,600 participants and 400 accompanying persons attended. It included an international map exhibition and 160 children's components. A technical exhibition was also part of the conference space. The Conference ran from Monday July 11 to Saturday July 16. There were 29 conference themes and 540 papers and 210 poster papers were presented.

Australian authors were:

- Sarah Anderson, NSW
- Fatina Basic, RMIT, Vic
- Michael Black, RMIT, Vic
- William Cartwright, RMIT, Vic
- X Chen, University of Melbourne, Vic
- Craig Feurherdt, DS&E, Vic
- David Fraser, RMIT, Vic
- Amy Griffin, DFA, ACT
- John Handmer, RMIT, Vic
- Dane Harkin, RMIT, Vic
- Graciella Metternicht, Curtin, WA
- Chris Pettit, DPI, Victoria
- Maree Platt, DS&E, Vic
- Dorothy Prescott, Vic.
- Cris Ramos, RMIT, Vic
- Judith Scurfield, State Library of Victoria, Vic.
- Karen Wealands, RMIT, Vic

Looking back over a number of years, to the 1984 Perth, Australia conference, it can be seen that these contributions have been continuous. A complete list of authors, papers and affiliations for papers presented from 1984 to 2005 is provided in the Appendix.

At the conference a number of awards were given for outstanding service to the ICA and to cartography generally. ICA awards were proposed to the Executive Committee under two award categories:

- Honorary Fellowships - awarded to recipients who have made outstanding contributions to the ICA; and
- Carl Mannerfelt Gold Medal - the highest award of the ICA. It recognises excellence in scholarship and research in Cartography and GI Science.

Awards were made as follows:

- Honorary Fellowships to Professor Pinhas Yoeli (Israel), Wanarat Thothong (Thailand), Professor Alan MacEachren (USA), Dr Michael Wood (UK) and Jose-Lusi Colomer Alberich (Spain); and
- The Carl Mannerfelt Gold Medal was awarded to Professor David Rhind (UK) (in the centre of the photograph in figure 3, with the ICA Executive Committee) and Professor Ernst Speiss (Switzerland).

Special Recognition was made to the late Professor David Woodward for his contributions to the history of Cartography project.



Figure 3. Professor David Rhing (centre) with ICA Executive Committee at ICC 2005, A Coruña, Spain.

To achieve its aims the ICA operates through a number of Commissions and Working Groups. It works with national and international governmental and commercial bodies and with other international scientific societies. Commissions and Working Groups carry out the general operations of the ICA. There are twenty-three Commissions and Working Groups. These are listed below, with associated URL to the Commission Web site:

- Commission on Cartography and Children (<http://lazarus.elte.hu/ccc/ccc.htm>)
- Commission on Education and Training (<http://lazarus.elte.hu/cet/>)
- Commission on Gender and Cartography (<http://www.geo.ar.wroc.pl/GC/>)
- Commission on Generalisation and Multiple Representation (<http://ica.ign.fr/>)
- Commission on the History of Cartography (<http://www.stub.unibe.ch/ica-chc/>)
- Commission on Incremental Updating and Versioning (<http://geo.haifa.ac.il/%7eicaupdt/>)
- Commission on Management and Economics of Map Production (<http://www.geocities.com/icacmp/>)
- Commission on Mapping from Satellite Imagery ([http://sfbay.wr.usgs.gov/%7egaydos/ica/ica\\_sat.html](http://sfbay.wr.usgs.gov/%7egaydos/ica/ica_sat.html))
- Commission on Map Projections (<http://www.csiss.org/map-projections/>)
- Commission on Maps and Graphics for the Blind and the Partially Sighted (<http://www.surrey.ac.uk/~pss1su/intact/>)
- Commission on Maps and the Internet (<http://maps.unomaha.edu/ica/>)
- Commission on Marine Cartography (<http://www.abdn.ac.uk/geospatial/ica/>)
- Commission on Mountain Cartography (<http://www.mountaincartography.org/>)
- Commission on National and Regional Atlases (<http://kartoweb.itc.nl/cnra/index.html>)
- Commission on Planetary Cartography (<http://www.nasm.edu/ceps/ica/>)
- Commission on Spatial Data Standards (<http://ncl.sbs.ohio-state.edu/ica/>)
- Commission on Theoretical Cartography (<http://rcswww.urz.tu-dresden.de/%7ewolodt/tc-com/>)
- Commission on Ubiquitous Mapping (<http://ubimap.net/>)
- Commission on Visualization and Virtual Environments (<http://www.geovista.psu.edu/sites/icavis/>)
- Working Group on Mapping Africa for Africa
- Working Group on Digital Technologies in Cartographic Heritage (<http://web.auth.gr/xeee/ICA-Heritage/>)

- Working Group on the History of Colonial Cartography in the 19th and early 20th Centuries (<http://www.histcolcarto.org/>)
- Working Group on Spatial Data Uncertainty and Map Quality

Commission meetings have always been an integral part of the way that the ICA operates. Take for example the Education Commission's meeting in Budapest in 1966 (figure 3) and its recent meeting, 40 years later, in Berlin in 2006 (figure 4). It is through continued efforts like this that the ICA advances cartography.



Figure 3. Commission on Education in Cartography 1966

Photo: <http://lazarus.elte.hu/hun/tanszjpg/regi/regi-kep.htm>. Used with permission.



Figure 4. Commission on Education and Training, Berlin 2006

Photo: <http://lazarus.elte.hu/cet/>. Used with permission.

A number of joint Commission meetings are also held. This allows for the cross-fertilisation of ideas from a number of Commissions, as well as developing joint projects. Typical of such a meeting was the the Joint ICA Commissions Seminar took place in Madrid 6 - 8 July 2005. The Seminar had the title "Internet-Based Cartographic Teaching and learning: Atlases, Map Use and Visual Analytics". The Seminar was organised by Lázló Zentai (Chair of the ICA Commission on Education) and Jesús Reyes. The local organiser was Rufino Pérez from the Departamento de ingeniería Topográfica Cartografía at the Universidad Politécnica de Madrid. Australian cartographers attended and some presented. These were:

1. David Fraser, RMIT, Victoria

2. Craig Feuerherdt, Department of Environment & Sustainability, Victoria, Australia
3. Maree Platt, Department of Environment & Sustainability, Victoria, Australia
4. Karen Wealands, RMIT, Australia
5. Chris Pettit, Department of Primary Industries, Victoria, Australia
6. Cristhiane da Silva Ramos, RMIT, Australia
7. William Cartwright, RMIT, Australia

The joint seminar attracted a large participation group, who are pictured in figure 5.



Figure 5. Joint Commissions meeting, Madrid, 2005. Photograph Laslo Zentai, used with permission.

Commission meetings also take place in more exotic locations. Take for example the meetings of the High Mountain Cartography Commission, who meet regularly in alpine areas. Figure 6 shows their recent workshop in Slovenia in 2006.



Figure 6. Mountain Cartography Commission workshop, Slovenia, 2006  
<http://www.mountaincartography.org/>. Used with permission.

The ICA promotes the generation of extensive publications, generally through its Commissions and Working Groups. This activity provides a focus for Commissions and

Working Groups and allows for knowledge about advances in contemporary thinking and research to be disseminated. The publications include books, journals and the ICA Newsletter.

ICA activities are also conducted in conjunction with sister societies. This enables the promotion and progress of activities that are mutually beneficial. The sister societies include:

- International Geographical Union
- Fédération Internationale des Géomètres
- International Society for Photogrammetry and Remote Sensing
- International Hydrographic Organisation
- International Map Trade Organisation
- International Association of Geodesy
- International Steering Committee for Global Mapping Secretariat: Geographical Survey Institute

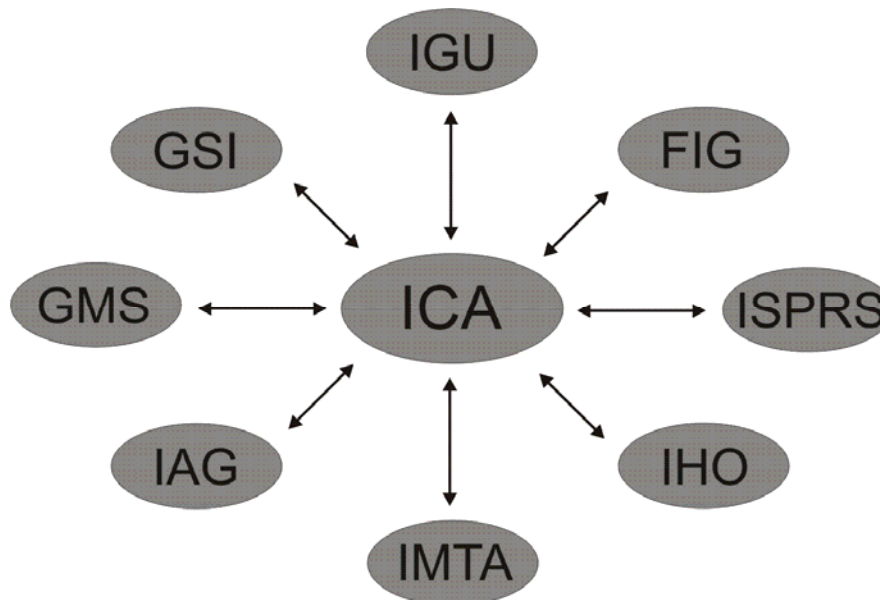


Figure 7. Links to sister societies.

Another activity that is important to the ICA is outreach programmes, where Commission and Working Group members facilitate courses in particular skills. Recently, as an adjunct to the 2006 New Zealand Cartographic Conference, GeoCart2006, a workshop was held on Maps and the Internet in October 2006. The programme was conducted by Professor Georg Gartner, vice-Chair of the Commission on Maps and the Internet and Professor William Cartwright, vice-President of the ICA. The photograph below was taken during the workshop.





Figure 8. Workshop on Interactive Mapping, Auckland, 2006. Commission on Maps and the Internet

The ICA also awards excellence in map design and production. At each International Cartographic Conference the Barbara Petchenik Children's World Map Competition is held. This exhibition of children's maps commemorates the work undertaken in the area of children and cartography by the late Professor Barbara Petchenik. At each ICA conference is an exhibition of maps, contributed by member nations. At the ICA Mapping Excellence Awards at ICC2005, in A Coruña, Spain, Australian mapping company, Meridian Maps received one of the awards. The photograph below shows Meridian Maps's principals Craig Molyneux and Simon Spivak being presented their award at the 2005 Spatial Sciences Conference in Melbourne, Australia. At right is the winning map.



Figure 9. Meridian Maps and their award-winning map. Images: Meridian maps. Used with permission.

### **The MSIA and the ICA**

Australia is a member of the ICA. MSIA representatives have contributed at general Assemblies and through with formal conference papers and Commission activities. Ron Furness and William Cartwright were the Australian representatives at A Coruña, Durban, Ottawa and Beijing.

As well, Professor William Cartwright is vice-President of the ICA and Professor Graciela Metternicht is the editor of the ICA Newsletter. In former times, Don Pearce (Australia) was Secretary-General of the ICA for many years.

The MSIA is also well-represented on Commissions and Working Groups. As at September 2006 the following positions were held:

- Commission on Marine Cartography - Chair: Ron Furness
- Commission on Education and Training - Vice-Chair: David Fraser
- Commission on Geographical Visualization and Virtual Landscapes - Members: Igor Drecki (NZ), Michael Black, Amy Griffin and William Cartwright (AUS)
- Commission on Maps and the Internet - Members: Michael Black, Amy Griffin and William Cartwright (AUS)
- Commission on Cartography and Children - Members; William Cartwright and Rod Gerber (AUS).
- Commission on mapping from Satellite Imagery -Commission Chair: Graciela Metternicht (AUS)
- Commission on Maps and Graphics for Blind and Visually Impaired People - Executive Liaison: William Cartwright (AUS)
- Commission on Spatial Data Standards - Members: Graham Baker and Abbas Rajabifard (AUS)
- Working Group on Use and usability - Member: Karen Wealands (AUS)

### **Conclusion**

The MSIA continues to contribute to the activities of the ICA. The Institute and its members have supported the ICA through its Executive Committee, Commissions and Working Groups and by editing the ICA newsletter. Continued association with this international body is essential for providing an Australasian voice and an Australian viewpoint in the international cartographic community.

### **References**

ETH Zurich, 2006, Eduard Imhof, <http://www.maps.ethz.ch/imhofN1engl.html>  
 International Cartographic Association, 2006, Association Web page, [www.icaci.org](http://www.icaci.org).

### **About the Author**

Professor William Cartwright was elected as Vice-President of the International Cartographic Association at the ICA General Assembly held in Durban, South Africa in August 2003. He is the liaison Vice-President for the Commissions on Visualization and Virtual Environments Commission, Maps and the Internet and Maps for the Blind and Visually Impaired. He has also been given the task to manage the 'Art' elements of Cartography and Geographic Information across all Commissions and Working Groups and the day-to-day activities of the ICA.

His role for the ICA is also to represent the Region and to promote activities and events in cartography and Geographic Information that occur in the region. He is physically located in the School of Mathematics and Geospatial Information at RMIT University in Melbourne, Australia. The school conducts undergraduate programmes in Cartography, Geomatics and Surveying. It also provides postgraduate study in these areas.

Regional input into the activities is encouraged. If readers are interested in becoming involved in ICA Commission / Working Group activities the way to do this is to either contact the Commission / Working Group chair directly or to contact Professor Cartwright ([william.cartwright@rmit.edu.au](mailto:william.cartwright@rmit.edu.au)) if you want a formal introduction to the chair or further information about how the Commission / Working Group operates.

Author	Year	Title	University/Company
William Cartwright	2005	DEVELOPING THE ILLUSTRATED WORLD ATLAS	RMIT University
Sarah Anderson			Weldon Owen Publishing and
David Fraser	2005	DEVELOPMENT OF THE ICA-SPONSORED INTERNET CARTOGRAPHY TEACHING PROGRAMME	RMIT University
Graciela Metternicht	2005	A SEMI-AUTOMATED APPROACH FOR GIS BASED GENERATION OF TOPOGRAPHIC ATTRIBUTES FOR LANDFORM CLASSIFICATION	Curtin University of Technology
Maree Platt	2005	SUSTAINABLE FUTURES THROUGH INTEGRATED DATA MANAGEMENT	Department of Sustainability & Environment
Hayley Rokahr			Department of Sustainability & Environment
Graciela Metternicht	2005	MULTI-TEMPORAL SPATIAL MODELLING OF NOXIOUS WEED DISTRIBUTION USING HISTORICAL REMOTE SENSING IMAGERY	Curtin University of Technology
T.P. Robinson			
David (Hyun Jong) Lee	2005	DEVELOPMENT OF A 3D GEO-REFERENCED GROUNDWATER MODEL FOR SALINITY MANAGEMENT	RMIT University
David Fraser			
Craig Feuerherdt	2005	MAPPING WATER RESOURCE DATA	Department of Sustainability & Environment
Michael Black	2005	WEB CARTOGRAPHY & WEB-ENABLED GEOGRAPHIC INFORMATION SYSTEMS (GIS) NEW POSSIBILITIES, NEW CHALLENGES	RMIT University
William Cartwright			
Karen Wealands	2005	USER ASSESSMENT FOR DEVELOPING OPTIMAL CARTOGRAPHIC REPRESENTATION MODELS WITHIN AN AUSTRALIAN MOBILE LOCATION-BASED SERVICES TRAVEL APPLICATION	RMIT University
William Cartwright			RMIT University
Suzette Miller			RMIT University
Peter Benda			Telstra
William Cartwright	2005	COMMUNITY COLLABORATIVE DECISION-MAKING TOOLS: DETERMINING THE EXTENT OF 'GEOGRAPHICAL DIRTINESS' FOR EFFECTIVE DISPLAYS	RMIT University
Chris Pettit	2005		Department of Primary Industries, VIC
Anitra Nelson	2005		RMIT University
Mike Berry	2005		RMIT University
Amy L. Griffin	2005	CAN YOU SEE WHAT I SEE? HELPING INDIVIDUALS BENEFIT FROM THE INSIGHTS OF INTERDISCIPLINARY COLLABORATION	University of New South Wales
Xiaogang Chen	2005	EXPLORATION OR COMMUNICATION: DEFINING EFFECTIVE VISUALISATIONS FOR SPATIAL DATA	University of Melbourne
Ian Bishop	2005		University of Melbourne
Mingzheng Shi	2005		University of Melbourne
Craig Feuerherdt	2005	EXPLORING FUTURE LANDSCAPES USING VIRTUAL ENVIRONMENTS	RMIT University
William Cartwright	2005		RMIT University
Michael Black	2005		RMIT University

Tim Germanchis	2005	USING COMPUTER GAMING TECHNOLOGY TO EXPLORE HUMAN WAYFINDING AND NAVIGATION ABILITIES WITHIN A BUILT ENVIRONMENT	RMIT University
William Cartwright	2005		RMIT University
Chris Pettit	2005		Department of Primary Industries, VIC
Fatima Basic	2005	COMMUNICATING FLOOD RISKS TO THE PUBLIC THROUGH VISUALIZATION IN SCIENTIFIC COMPUTING	RMIT University
William Cartwright	2005		RMIT University
John Handmer	2005		RMIT University
Dorothy F. Prescott	2005	AUSTRALIAN PLATES IN JOHN ARROWSMITH'S LONDON ATLAS OF UNIVERSAL GEOGRAPHY	University of Melbourne
Cristhiane da Silva Ramos	2005	EXPANDING MAP ACCESS FOR BRAZILIAN CHILDREN: AN OPEN SOURCE TEMPLATE FOR PUBLISHING SCHOOL ATLASES ON THE WEB	RMIT University
William Cartwright	2005		RMIT University
Judith Scurfield	2005	AUSTRALIA ON THE MAP 1606 - 2006	State Library of Victoria
Dane Harkin	2005	DESCOMPOSING THE MAP: USING HEAD-UP DISPLAY FOR VEHICLE NAVIGATION	RMIT University
William Cartwright	2005		RMIT University
Michael Black	2005		RMIT University
Lihua Zhao	2005	CENSUS MAPPING FOR MARKET RESEARCH AND PRODUCTS ADVERTISEMENT	University of New South Wales

William Cartwright	2003	EXPLORATION OF THE POTENTIAL OF USING THE CONCEPT OF THE GEOEXPLORATIRIUM FOR FACILITATING ACQUISITION OF GEOGRAPHICAL KNOWLEDGE: FIRST CUT	RMIT University
Bob Williams	2003		Defence Science and Technology Organisation
David Fraser	2003	CARTOGRAPHIC VISUALIZATION AND MODELING OF NATURAL DISASTERS	RMIT University
Tim Germanchis	2003	THE POTENTIAL TO USE GAMES ENGINES AND GAMES SOFTWARE TO DEVELOP INTERACTIVE, THREE-DIMENSIONAL VISUALIZATIONS OF GEOGRAPHY	RMIT University
William Cartwright	2003		RMIT University
Russel Hay	2003	VISUALISATION AND PRESENTATION OF THREE DIMENSIONAL GEOSCIENCE INFORMATION	Geoscience Australia
Metternicht, G.	2003	EXPANDING DISTANCE EDUCATION IN THE SPATIAL SCIENCES	Curtin University of Technology
Feuerherdt, C.	2003	DISTRIBUTING CATCHMENT INFORMATION: AN AUSTRALIAN PERSPECTIVE	Department of Primary Industries, Bendigo, Victoria
Platt, M.	2003		Department of Primary Industries, Bendigo, Victoria
Metternicht, G.	2003	FARM SCALE SOIL CARTOGRAPHY USING ASTER DATA AND GIS TECHNOLOGY	Curtin University of Technology
Arnold, L.	2003	A SCALE-INDEPENDENT DATABASE FOR DYNAMIC SPATIAL UPDATING OF NON-STANDARD MAP PUBLICATIONS	Curtin University of Technology

Wright, G.	2003		Curtin University of Technology	
Chhetri, P.	2003	MAPPING THE POTENTIAL OF SCENIC VIEWS FOR THE GRAMPAINS NATIONAL PARK	RMIT University	
Arrowsmith, C.	2003		RMIT University	
Fatima Basic	2003	GEOGRAPHIC VISUALIZATION TOOLS FOR COMMUNICATING THE RISK OF FLOODS	RMIT University	
William Cartwright	2003		RMIT University	
John Handmer	2003		RMIT University	
Metternicht, G.	2003		TRIVARIATE SPECTRAL ENCODING: A PROTOTYPE SYSTEM FOR AUTOMATED SELECTION OF COLOURS FOR SOIL MAPS BASED ON SOIL TEXTURAL COMPOSITION	Curtin University of Technology
Stott, J.	2003		Curtin University of Technology	
Metternicht, G.	2003	CARTOGRAPHIC TOOLS FOR IMPROVED SPATIAL PLANNING OF RURAL AREAS: MULTI-CRITERIA DECISION MAKING TECHNIQUES AND GEOGRAPHIC INFORMATION SYSTEMS	Curtin University of Technology	
Suhaedi, E.	2003		Curtin University of Technology	
Metternicht, G.	2003		Curtin University of Technology	
Gonzalez, S.	2003		Curtin University of Technology	
Honey, F.	2003		Curtin University of Technology	
Beeston, G.	2003		Department of Agriculture of Western Australia	
Delfos, J.	2003		SpecTerra Services Pty Ltd	
Platt, M.	2003		CATCHMENT ACTIVITY MANAGEMENT SYSTEM	Centre for Land Protection Research - DPI - VIC
Urquhart, K.	2003		ENSURING USEFUL CARTOGRAPHIC REPRESENTATIONS IN LOCATION-BASED SERVICES	RMIT University
William Cartwright	2003	RMIT University		
Miller, S.	2003	RMIT University		
Mitchell, K.	2003	Webraska Mobile Technologies SA		
Quirion, C.	2003	Webraska Mobile Technologies SA		
Benda, P.	2003	Sensis Pty		

David Fraser	2001	The development of Modules for the ICA, Commission on Education and Training Web Course on Cartography	RMIT University
GJ Newnham	2001	Using Hyperspectral Data to Map Agricultural Crop Health and Biomass for Precision Agriculture	
JED Fox	2001		
Graciela Metternicht	2001	A Semi-Automated Approach for the Production of Land-Cover Change Maps Using Fuzzy Sets and Remotely Sensed Data	Curtin University of Technology
Sergio Gonzales	2001		
Graciela Metternicht	2001	Mapping variations in Crop Conditions Using Airborne Videography	Curtin University of Technology

E. Hageman	2001		
F. Honey	2001		
G. Beeston	2001		
Todd Walker	2001	Translation Rules for the Dynamic Generation of New Media Atlases	
William Cartwright	2001		RMIT University
William Cartwright	2001	Applying the Geoexploratorium to Geography Teaching Programmes	RMIT University
Kirk Mitchell	2001	Wireless Mapping and Guidance Services	
Teresa C. Crowley	2001	Alternative Map Representations: The Adaptation of GIS to Suit the Mapping Needs of Indigenous Communities	
Gary J. Hunter	2001		University of Melbourne
Blanca Mancilla	2001	A New Approach to Interactive Mapping	
Tim Lambert	2001		
John Plaice	2001		
David Fraser	2001	Development of a Spatially Based Decision-Making Construct With Applications to Rural Land Management	RMIT University

Brian McLachlan	1999	Implementation of a new military topographic production system into the Army Topographic Support Establishment, Bendigo Australia	Not informed
Teresa C. Crowley	1999	The Changing Face of Indigenous Mapping	University of Melbourne
Gary J. Hunter	1999		University of Melbourne
William Cartwright	1999	Multimedia Cartography Approaches to the Presentation of Geographical Information	RMIT University
William Cartwright	1999	The Development of a Hybrid Discrete/Distributed Interactive Multimedia Package for Teaching Geographical Concepts by Exploration	RMIT University
David Fraser	1999	Interactive, User-Oriented, Error Modelling Designed to Support Rural Spatial Analysis and Information Production	RMIT University
Ronald A. Furness	1999	Electronic Navigational Charting around Australia: Finally, we get to the cartographic production bit!	Australian Hydrographic Office

B. Su	1997	Some Basic Mathematical Models for Feature Displacement in Digital Map Generalization	
B. Su	1997	Morphological Transition for Detecting Spatial Conflicts in Digital Generalization	
William Cartwright	1997	The Application of New Metaphor Set to Depict Geographic Information and Associations	RMIT University
S. Ashdowne	1997	A Virtual Atlas on the World Wide Web: Concept, Development and Implementation	
William Cartwright	1997		RMIT University
L. Nevile	1997		

T. Kwan	1997	Understanding of Children's Ability to Wayfind around an Unfamiliar Environment Using a Large Scale Map	
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R. A. Furness	1995	Technological Imperatives in the field of Hydrography and their Impact on the Profession of Marine Cartography	
X. Wu	1995	Mapping from SPOT Images Using Digital Photogrammetric Workstations	
Kurt Kubik	1995		
G. D. Lodwick	1995	Trends in cartographic education in Australia	
G. L. Wright	1995		
B. Su	1995		
T. Y. Kwan	1995	A Generalised frame for cartographic knowledge representation	
C. Domeniotis	1995	Hong Kong Children's understanding and experience of mapwork tasks prior their formal map learning in school	
G. D. Lodwick	1995		
G. L. Wright	1995	Intelligent interpretation of Spot data for extraction of a forest road network	
A. Turk	1995	Designing maps to support native title negotiation and arbitration in Australia	
W. Mackaness	1995		
William Cartwright	1995	Multimedia and mapping: using multimedia design and authoring techniques to assemble interactive map and atlas products	RMIT University
C. L. Ogleby	1995	Digital Technology in the documentation and conservation of cultural monuments	
W. A. Mackaness	1995	A Constraint Based Approach to Human Computer Interaction in Automated Cartography	
R. Irwin	1995	Cartography crossing Australian borders	
G. A. Underwood	1995	Cartographic animation of mining progression	
Z. Li	1995		
M. Balodis	1995	Geoinformation in pre-literate communities	
D. Parkes	1995	Access to complex environments for blind people: multimedia maps, plans and virtual travel	

A. Turk	1993	Designing advanced GIS visualisations using cognitive ergonomics theories, models and procedures	
William Cartwright		Interactive Multimedia, Maps and Users: User Interface Design Concepts	
W. Zhang	1993	Knowledge representation approach to cartographic conceptual model formalisation	
G. Brooke	1993		
K. Kubrik	1993		
G. F. Spencer	1993	The scope of tengraph	

William Cartwright	1991	Research and development in Australia and implications for Australian cartographic education	
Brian J. Williams	1991	The evolution of the professional cartographer in Australia 1945-1990	
Brian J. Hannigan	1991	Towards better user interfaces in automated mapping systems	
Kurt Kubik	1991		
R. M. Boskovic	1991	Provincial resource mapping in Papua New Guinea	

Jack Massey	1989	CD-ROM Storage and Geo-Statistical Data	Space Time Research PTY. Ltd.
John P. Bertacco	1989	Multi-Component Quantitative Mapping by Principal Component Analysis	RMIT University
Grahame Kerr Lindsay	1989	Satellite image mapping of the Larsemann Hills, Antarctica	Australian Surveying and Land Information Group
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Brian J. Williams	1989	Future Directions: Educating the Cartographer in Australia	RMIT University
Erdem Aydin	1989	The division of survey and mapping Victoria, Australia	Department of Survey and Mapping

P. G. Ochmann	1987	Indexing Map Series Using Interactive Graphic Computer Systems	
K. Smith	1987	Mapping for Tourists in Queensland, Australia	
William Cartwright	1987	Cartographic Education in Victoria, Australia, An Educational response to a Cultural Demand	RMIT University
K. Smith	1987	The Status of Cartographers in Australia	

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