

**Thursday February 20, 2003**

<b>Time</b>	<b>Authors/Event</b>	<b>#</b>	<b>Paper/Chair</b>
<b>8:00-9:00</b>	<b>Registration</b>		
<b>9:00-9:15</b>	<b>Conference Welcome</b>		<b>G.G. Hohmann trustees</b>
<b>9:15-10:35</b>	<b>Minerals Session</b>		<b>Chair Brian Spies</b>
9:15	Art Raiche, Fred Sugeng and David Annetts	1	Finding Targets in Complex Hosts using Airborne EM
9:35	Richard Smith, C. Hyde, T. Lee and R. Almond	2	Impulsive moments at work
9:55	Niels Christensen, P. Wolfgram and D. Sattel	3	Approximate 2D Inversion of AEM Data using the adaptive Born approximation
10:15	David Annetts, F. Sugeng and A. Raiche	4	Modelling the 3D EM response of Nickel Sulphide orebodies
<b>10:35-11:00</b>	<b>Tea</b>		
<b>11:00-12:00</b>	<b>Minerals and Novel Techniques</b>		<b>Chair Lindsay Thomas</b>
11:00	Michael S. Zhdanov and E. Tartaras	5	Three-dimensional interpretation of the helicopter-borne electromagnetic (HEM) survey in the Voisey's Bay area
11:20	Louise Pellerin and G. Michael Hoversten	6	Two-dimensional inverse and three-dimensional forward modelling of MT data to evaluate the mineral potential of the Amphitheatre Mts Alaska
11:40	Ganquan Xie, C.C. Lin, J. Li and J. Liu	7	GILD EM Modeling In Nano-Geophysics and Nano-Materials Using Magnetic Field Integral Equation
<b>12:00-12:30</b>	<b>Poster Advertisement (1 minute per poster)</b>		<b>Chair Art Raiche</b>
<b>12:30 – 2:30</b>	<b>Poster Session + Lunch</b>		
<b>2:30-3:30</b>	<b>Environmental Studies Session</b>		<b>Chair Richard Smith</b>
2:30	Richard Lane and Ross Brodie	8	Examples and Issues for AEM 3D Conductivity Mapping in Land Management Applications
2:50	Yutaka Sasaki	9	3-D electromagnetic modeling and inversion incorporating topography
3:10	Matthew Ludwig, D. Alumbaugh, D. LaBrecque, R. Sharpe, G. Heath, and J. Svoboda	10	3D EM modeling of a new Magnetometric Resistivity System
<b>3:30-4:00</b>	<b>Tea</b>		
<b>4:00-5:00</b>	<b>Environmental Studies Session continued</b>		<b>Chair Louise Pellerin</b>
4:00	James Reid, J. Vrbancich and T. Worby	11	Airborne electromagnetic measurements of Antarctic sea ice thickness: a three-dimensional model study
4:20	Toshihiro Uchida and Yutaka Sasaki	12	Stable 3-D inversion of MT data and its application for geothermal exploration
4:40	Gail Geath, J. Svoboda, M. Ludwig, D. Alumbaugh, D. LaBrecque, and R. Sharpe	13	Magnetometric Resistivity-Electrical Resistivity Tomography Field results and inversion ground truth
<b>5:00-6:00</b>	<b>Poster Session and Drinks</b>		

### Friday February 21, 2003

<b>Time</b>	<b>Authors/Event</b>	<b>#</b>	<b>Paper/Chair</b>
<b>8:30-10:10</b>	<b>Crustal Studies</b>		<b>Chair Phil Wannamaker</b>
8:30	George R. Jiracek	14	Current Status of the Rayleigh Scattering Approach in Three-Dimensional Electromagnetic Modeling
8:50	Katherine Broxholme, G. Heinson, S. Busuttill and T. Lilley	15	Two-dimensional Magnetotelluric Responses of Three-dimensional Bodies
9:10	AA Adepelumi, JM Flexor, SL Fontes, and PA Schnegg	16	Three-dimensional magnetotelluric modeling of the Serra da Cangalha impact crater, northeastern Brazil
9:30	Chow-Son Chen, J. Li, C.C. Lin, and G. Xie	17	Magnetotelluric and Flow Modeling And Joint Inversion for Geophysical Exploration
9:50	Jandyr Travassos, P. T. L. Menezes, F.M. Santos	18	Electromagnetic model for S. Miguel Island-Azores
<b>10:10-10:40</b>	<b>Tea</b>		
<b>10:40-12:20</b>	<b>Petroleum Exploration and Borehole EM Session</b>		<b>Chair Michael Zhdanov</b>
10:40	Kerry Key, Steven Constable and Chester Weiss	19	Mapping 3D salt with 2D marine MT - Case study from Gemini Prospect,
11:00	Sanjun Li and Qiang Zhou	20	Development of Practical 2-D Induction Log Inversion
11:20	Tsili Wang and Jack Signorelli	21	3-D Electromagnetic Modeling for Wireline and MWD Logging Development
11:40	Art Raiche, F. Sugeng and H. Soinenen	22	Modelling EM Dipole-Dipole Drill-Hole Data with the Loki Edge-Finite-Element Program
12:00	Jandyr Travassos, A. F. Machado, P. T. L. Menezes	23	Three-dimensional magnetotelluric modeling of the central portion of Parana Basin
<b>12:20:1:50</b>	<b>Lunch</b>		
<b>1:50-3:30</b>	<b>Minerals Exploration and Borehole EM</b>		<b>Chair Steve Mudge</b>
1:50	Michael S. Zhdanov and N. Golubev	24	Three-Dimensional Inversion Of Magnetotelluric Data In Complex Geological Structures
2:10	Sheng Fang, G. Gao and C. Torres-verdin	25	3D Electromagnetic Anisotropy Modeling Using Integral Equations
2:30	Benson Singer, A. Mezzatesta and T. Wang	26	Integral equation approach to modeling 3-D electromagnetic field. Examples of application to borehole problems
2:50	Daniel Sattel and James Reid	28	The modelling of AEM anomalies with dipoles in a layered earth
<b>3:10-3:40</b>	<b>Concluding Remarks</b>		<b>Summary and Reflections by Ted Lilley Concluding remarks by G.W. Hohmann trustees</b>
<b>3:45:4:45</b>	<b>Concluding Cocktails</b>		

## Posters

Authors	#	Title
David Annetts, F. Sugeng and A. Raiche	29	Mapping current flow in 3D Airborne EM Models
Ralph-Uwe Boerner	30	3D Finite Difference Time Domain Modeling of Electromagnetic Fields
A V. Christiansen and E. Auken	31	Layered 2-D inversion of profile oriented data
Guozhong Gao, Sheng Fang, Carlos Torres-verdin	32	A Novel Approximation in 3D Electromagnetic Anisotropy Modeling
Thomas Gunther and Klaus Spitzer	33	Improvements on 3d Dc Resistivity Inversion
Gerhard Kurz, J. Igel and R. Schulz	34	3D electromagnetic Modeling in frequency domain - Studies of underground measurements in a salt mine
Heidi Anderson Kuzma	35	Kernel Methods for approximating the solutions to EM inverse problems: how to find the thickness of a buried spherical shell
Yuguo Li and Klaus Spitzer	36	Three-dimensional DC resistivity forward modeling using finite elements in comparison with finite difference solutions
Yuguo Li and Heinrich Brasse	37	Finite element modeling of electromagnetic fields in three-dimensional anisotropic structures using scalar and vector potentials
Yuguo Li and Klaus Spitzer	38	Finite element resistivity modeling for three-dimensional structures with arbitrary anisotropy using secondary potentials
V. Shuman	39	The General Theory Of Geoelectromagnetic Sounding Accounting The Electrodynamics Of Spherical Sources
Weerachai Siripunvaraporn, Gary Egbert and Mokoto Uyeshima	40	Three-Dimensional Magnetotelluric Inversion: Data Space Method
JeongSul Son, Yoonho Song, and Jung-Hee Suh	41	High frequency 3D EM modeling using vector finite elements
Philip E. Wannamaker and Yutaka Sasaki	42	Three-Dimensional Electromagnetic Inversion Combining a Finite Difference Forward Solver with Fast Approximate Jacobians Based on Integral Equations
John Weaver, A.K. Agarwal and F.E.M. Lilley	43	The Relationship between the Magnetotelluric Tensor Invariants and the Phase Tensor of Caldwell, Bibby and Brown
Xiaoping Wu	44	Secondary potential finite-element algorithm for 3-D dc resistivity modeling using shifted incomplete cholesky conjugate gradient method
Ganquan Xie, C.C. Lin, C.S. Chen, J. Li	45	The 3D GILD EM And Acoustic Modeling And Joint Inversion
Myeong-Jong Yi, J.H. Kim, S.K. Lee, S.J. Cho and Y. Song	46	Application of 3-D resistivity tomography to delineate subsurface structures
Changchun Yin	47	Electrical anisotropy and seafloor EM exploration - A forward modelling problem