ORAL AND POSTER PRESENTATIONS

EAEG Division and joint EAEG/EAPG Sessions

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* denotes speaker
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* denotes speaker
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Ali H. Mayouf* and Emin Yanilmaz.

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* denotes speaker
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Robert J Ferguson*, Robert R Stewart and Henry C Bland

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* denotes speaker
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09:25 A050
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M.M.N. Kabir* and D.J. Verschuur

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P Galuppo*, F Finetti, R Geletti and M Papan

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Robert Bloor and Neil Jones

11:30 A055
Parameter Estimation and Time Processing in Transversely Isotropic Media
Tang Alihelih* and Rya Tasanén

11:55 A056
Simultaneous Statics and Velocity Estimation in Complex Media: Demonstration with the Marmousi Dataset
Ken Lerner* and Timo Tien

* denotes speaker
Borehole Geophysics

Chairman: G. Omnes

09.00  B049
Cross Well Seismic Reservoir Characterization — a Case Story, Hans E. Sheline.

09.25  B050

09.50  B051
Crosswell Seismic Processing — Traveltime or Waveform Inversion, Anthony A. Vassiliou.

10.15  B052
Preconditioning and Analysis of Different Wavefield Separation Techniques on Crosswell Data, James W. Rector and Jerome I. Mars.

10.40  B053
Diffraction of Seismic Wave by Fractures — Modelling and Observations, Enru Liu*, Stuart Crampin and John A. Hudson.

11.05  B054
Synthetic Seismograms in a Simulated Uniwell Borehole Seismic Fluid-Front Imaging Experiment, P.C. Leary.

11.30  B055

11.55  B056
Markov Segmentation and Cleaning of Well Logs, E.J. Robinson and R.E. White.
Engineering/Mining

Chairman: A. Øfsth us

09.00 C049

09.25 C050

09.50 C051

10.15 C052
A Generalized First Arrival Traveltime Curve for Shallow Refraction Seismic Interpretation, Hamdy H. Seisa.

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11.05 C054

11.30 C055
Ultra Acoustic Tomography for Characterizing the Excavation Disturbed Zone, C. Cosma.

11.55 C056
Estimation of Love Wave Attenuation Dispersion by Modified Spectral Ratio Method, Xiao-Ping Li.

* denotes speaker
The Importance of Correctly Formulating Inductive and Galvanic Scattering in EM Simulation, Peter W. Walker* and Ross W. Groom.


Transforming the Transient EM Diffusive Equation to a Seismic-Equivalent Wave Equation, Andrew J.S. Wilson*, Anton M. Ziolkowski, Bruce A. Hobbs and David S. Sharrock.


Geophysical Ground Measurements on Glaciated Terrain in Queen Maud Land Antarctica, J. Lehtimäki* and T. Ruotoistenmäki.
Processing I

Chairman: J. Vallet

The Technique of Seismic Data Processing in the Salt-Bearing Sedimentary Basins (Application to Precaspian Basin, Russia), Karen V. Pairazian.

Optimum Multichannel Filtering of Seismic Records with Different Spectral Characteristics, Y.K. Tyapkin* and E.I. Shatylo.


The Application of the Common Reflecting Element (CRE) Method for Imaging, César Barajas-Olalde* and Wolfgang Rabbet.

Filtering Vibroseis Data in the Pre-Correlation Domain, Shuang Qin* and David K. Smythe.

Uses of Land Array Recording of Reflection Profiling Airgun Shots at Offsets of 10-40 km, David B. Snyder*, Adam Law and Gillian Lindsey.

Waveform Based Reflectivity Analysis, Tianyue Hu* and Roy E. White.


* denotes speaker
Interpretation I

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Error Analysis for the PDA Tracker in an Interpretation Environment, C.A. Woodham*, W.A. Sandham and T.S. Durrani.

P012

P013
Results of Seismic and Magnetotelluric Measurements in the Bohemian Massif, Austria, Kay Aric*, David K. Smythe and Antal Adam.

P014
Geophysics and CD-ROM Technology, Markku Peltoniemi.

P015
Nature of Stratified Structure and Sequence Stratigraphic Interpretation of Seismic Data, Ivan V. Karpenko.

P016
Joint Inversion of Seismic and Gravity Data, Xiong Li.

P158
The Interpretation of Geological and Seismic Data of the Ionian and Kruja Tectonic Zones in Albania, Ahmet Collaku.

P159
3D Post Stack Depth Migration in the UK Southern North Sea - a Case Study, Ron Roberts.

P160
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**P017**
Shear Wave VSP in Barbados Ridge Accretionary Complex, Ocean Drilling Programme Leg 156, S. Peacock*, G.K. Westbrook and Leg 156 Shipboard Scientific Party.

**P018**
Significance of Thin-Layering in the Seismic Frequency Range, Thilo Müller* and Martin T. Widmaier.

**P019**
Low Frequency Anisotropy of Layered Media, S. Gelinsky* and S.A. Shapiro.

**P020**

**P021**
Acoustic Anisotropy of Rocks with Non-Circular Cracks, Anne Skjærstein*, E. Fjaer and J.S. Rathore.

**P022**
Changes in the Velocity and Attenuation of Compressional and Shear Waves in Rocks Under Triaxial Stresses, D.A. Gunn.

**P023**
Accuracy of Anisotropic Layer Parameters Estimated by Traveltime Analysis, Björn E. Rommel.

**P024**
Travel-Time Curve Inversion for Transversely Isotropic Media with the Help of an Evolution Strategy, Volker Dirks.

**P025**
Modification of Layer Stripping Technique for Strong Anisotropy, Sergei Gorshkalev* and Wladimir Karsten.

**P026**
The Study of Elastic Symmetry and Anisotropy of Elastic Body Waves for Carbonatic Rocks,
S.A. Vyzhva*, G.T. Prodajvoda, V.V. Korol,
A.A. Kulickov and P.J. Cholach.

* denotes speaker
Electrical

Chairman: J. Vallet

Inversion of Earth Resistivity Data from the Multi-Electrode Rescan System,

Self Potential Anomalies as Possible Indicators in Search for Oil and Gas Reservoirs, Alfred Frasheri.

Some Particular Aspects of Using Alpha Media Theory,
Paul Georgescu*, Dumitru Ion and Ioan Gavrila.

Electrometric Methods Usage for Geological and Geoecological Problems Solving on Russia's Arctic Shelf, M. Holmianskiy.

A Study of Non-Linear Techniques for the 2D Inversion of Earth Resistivity Data,

The Use of ΔV/I Ratio for Interpretation of VES, Dumitru Ion*, Paul Georgescu and Victor Niculescu.

Evaluation of Well Casing Effect on Measurements with Surface-to-Borehole Electrode Arrays, Y.A. Dashevskii* and S.N. Voronkov.


* denotes speaker
Acquisition

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Comparison Tests of Shallow Seismic Reflection Sources,
V.C. Karastathis*, I.F. Louis, G.A. Karantonis and
G.V. Apostolopoulos.

Source Spectrum Estimation and Charge Depth
Optimization,
Ryuhei Murayama*, Katsuya Watanabe, Koichi
Nakagami and Toshimichi Otsuka.

Data Acquisition Research with the Delft Physical
Modelling Facility,

Three-Component Ocean Bottom Seismographs
Used in Prospecting Off Northern Norway,
Rolf Mjelde*, Eivind W. Berg, Asle Strøm, Hideki
Shimamura, Toshihiko Kanazawa and Jan Petter
Fjellanger.

Experiences with a Super Wide 3D Marine
Acquisition in the North Sea,
Ivar Sandø* and Tor Veggeland.

Monitoring of Harmonic Distortion in Vibroseis
Data by a Pure Phase Shift Filter, Xiao-Ping Li.

The Few Simple Rules of Array Techniques for an
Effective Groundroll Suppression - A Summary,

Tow Noise Suppression in Marine Hydrostreamers,
J. Luscombe.
Interpretation II

Chairman: D.P. Milas

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The Use of Attenuation as a Possibility to Get Additional Information from Seismic Data, S. Pröhler*, K. Deubel and H. Gaertner.

P045
Studying Lithology and Fluid Indicators on a Seismic Workstation, A.C. Kemp* and J.W. Gallagher.

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P048
Visualization of Hidden Geology with Support from Interpretation of Geophysical Anomalies, Orlando Hernandez.

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P050
A New Interpretational Technique of Geophysical Data - Indication of Rhythmic Disaccordance, Arnold Ye. Kulinkovich.

P051
Workstation Interpretation - a Comparison of Data Stored at 8 and 16-Bit, G.A. Roberts* and M.J. Hughes.
Ground Penetrating Radar/Environment

Chairman: D.P. Milas

P052 Examination of Concrete Structures Using GPR, V. Mayer*, G. Liebhardt, K.-J. Sandmeier and H. Wilhelm.


P055 Target Location Based on Crosshole Radar Measurements, Leiv-J. Gelius* and Ingvild Johansen.

P056 Geophysical Exploration for Palaeochannels in Western Australia, V.C. Wilson*, M. Cooper and M. Seman.


* denotes speaker
Processing II

Chairman: L. Peardon

Solution to the Earth Model Sampling Problem, E. Szaraniec.


Phase Quality Data Control Using the Wavelet Transform, Fouzia Asfirane*, Jean-Marc Rodriguez and Philippe Julien.

Processing Experiences with Shallow-Seismic Reflection Data, Tamas Toth*, Tamas Bodoky, Laszlo Gili and Jozsef Lukacsy.

A Method for the Trace Interpretation and Extrapolation by Fourier Transform, Hiroshi Amano.

Analysis of Instantaneous Seismic Velocities to Predict the Presence of Tectonic Blocks, Michaele Borodavkin* and Sergei Ptetsov.

Predictive Deconvolution Revisited with Neural Nets, Sven Treitel and Robert Essenreiter.

Maximum Likelihood Signal Estimation of Complicated Seismic Record Model, Y.I. Tyapkin.

Moveout Analysis for Transversely Isotropic Media with a Tilted Symmetry Axis, Ilya Tsvankin.

Discrete Inverse Methods for Seismic Waves in Horizontally Layered Media, Virgil Bardan.
Borehole and VSP I

Chairman: L. Peardon

Further Development of a Borehole Sparker Source, 
Ben Dyer* and Roy Baria.

The 'Shock Gun' - a Revolutionary New Seismic Source Based on 'Shock Tube' Technology, 
Steve Callan* and Patrick Bermingham.

Aperture Compensated Discrete Fourier Transform and Applications, 
Mauricio D. Sacchi* and Tadeusz J. Ulrych.

Investigation of a Radical Approach to Seismic Mapping to Faults, 
P. Jackson, I.M. Mason, P. Tu and B. Zhou.

3D Interpretation of Multi-Offset VSP-Data in Crystalline Rock, 
P.J. Heikkinen* and C. Cosma.

Experiences with Anisotropic Well Seismic Migration - Field Data Example, G.M. Jackson.

The Generation of Pseudo VSP Data from Land Data, 
R. Ala'i* and C.P.A. Wapenaar.

* denotes speaker

Seismic Refraction Investigations of Salair Multimetallic Deposit, V.B. Piip.


Determination of Rock Rippability as Derived from Seismic Data, S. Sirri Seren* and Nikolaus Horn.


Inversion

Chairman: L. Peardon

Offset-Angle Conversion from Depth Migrated Section, Side Jin*, Naamen Keskes and Wafik Beydoun.

The Use of Regularized Global Approximation Algorithm for 1D Waveform Inversion, Gennady Ryzhikov*, Marina Biryulina and Shmariahu Keydar.

How Much Information is There in Seismic Data?, Peter Harris.


How to Enhance the Resolution of Diffracted Waves Seismic Imaging, V.B. Zyrinov.

On the In-Seam Seismic Inverse Problem - Horizontal and Vertical Inversion of Love Seam Wave Data, M. Dobroka*, T. Fancsik and A.A. Amran.

AVO Inversion of Troll Field Data, Arild Buland*, Martin Landrø, Mona Andersen and Terje Dahl.

Robust Joint Inversion of Geoelectric, Refraction- and Surface Wave Seismic Data, M. Kis*, A.A. Amran and M. Dobroka.

Reflections on Uniqueness of Refracted Wave Travel-Time Curve Inversion, Eugene K. Lossovsky.
Migration I

Chairman: B. Ursin

Migration of the Large Offset Data and Environmental Safety Problem of Seismic in Europe, George D. Lesnoy.

Recursive Cell Raytracing, J. Pajchel* and T.J. Moser.

Kinematic Operators in Seismic Reflection Imaging, Frank Liptow* and Peter Hubral.


3D Migration of Areal VSP Data from Tengiz Oilfield, Sergey A. Birdus.

Modelling and Migration of P-SV Seismic Data Considering 2D Isotropic and Transversely Isotropic Media, M.A. Barsottelli Botelho* and F.S.M. Dos Santos.

Effects of Fine Layering in the Near Borehole Wall on a Tube Wave Propagation, 
P. Krauklis*, L. Krauklis and N. Smirnov.

Lithological Information from Borehole Full Wavetrain Analysis, 
H. Schütz*, R. Ernst and L. Engelhard.

Waveform Inversion of Seismic P-Wave Attenuation from Borehole Compressional Wave Logs, X. Tang and K.-M. Strack.

Relationships Between Velocities, Attenuations and Density of Crystalline Rocks in the KTB Area, Xiao-Ping Li and Sandra Richwalski*.

Crosshole Seismic Reflection Imaging of Anisotropic Media, Peter S. Rowbotham.

Geophysical Methods and Tools for Borehole Measurements Oriented to Hydroecological Applications, K. Buckup* and G.N. Sideris.

Transient Dielectric Logging (Theoretical and Numerical Statements), S.V. Martakov* and A.B. Cheryauka.

Magnetotelluric Survey in the Carpathians (Southern Poland), Juliusz Miecznik* and Wojciech Klityński.

Analog-Scale Modelling Transient Electromagnetic Field in Dispersive Media, F.M. Kamenetsky* and P.V. Novikov.

Can Measurements of Spatial Gradients Improve EM Resolution?, Daniel Sattel* and James Macnae.


Some Results of Marine Magnetovariational Observations, L. Abramova* and Yu. Abramov.


Gravity and Magnetics I/
Crustal

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Aeromagnetic Mapping and Interpretation of Mafic Dykes in Eastern and Southern Africa, M.S. Mubu* and C.V. Reeves.

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An Integrated Geophysical Study of the Murzuk Basin (Southwestern Libya), A.S. Sahil*, C.J. Ebinger and R.A. Clark.

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Wavelet Transform Analysis of Heterogeneities from Sonic Measurements, Xiao-Ping Li and Johannes Haury*.

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M.M.N. Kabir*, L. Faqi and D.J. Verschuur.

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Depth Migration by Polynomial Expansion,
Ekkehart Tessmer*, Dan Kosloff and Hillel Tal-Ezer.
Tomography/Rock Physics

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3D Ray Tracing by the Fermat's Principle in Irregular Grids,
Gualtiero Böhm*, Gianni Madrussani and Aldo L. Vesnaver.

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Gibbs Statistics and Diffusion Equation in Geotomography, Philip Carrion.

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Simultaneous Velocity and Interface Inversion of a Combined Normal-Incidence and Wide-Angle Dataset,
M. McCaughey* and S.C. Singh.

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The Sampling Problem in Seismic Tomography, Aldo L. Vesnaver* and Gualtiero Böhm.

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Deviated-Borehole Diffraction Tomography in the Frequency-Space Domain, Thomas Rühl.

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Dry Rock Model Prediction to Improve Confidence in a 3D SEM Petrophysical Distribution, Kahina Zizi.

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Spectral Properties of Coupling Losses - a Laboratory Study, A.P. Shatilo.

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Modelling Elastic Wave Propagation in Siliciclastic Rocks,
Shiyu Xu* and Roy E. White.

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Geomechanical Modelling of Scenarios for Different Geological Settings with the Finite Element Structural Mechanics Package DIANA, Wouter Zijl*, Jan Lutgert and Ipo Ritsema.

* denotes speaker


Gravity Anomalies Due to Overburden, Bedrock Weathering and Fracture Zones, Seppo Elo.


Geomaster - a Program for Interactive 3D Gravity Inversion and Forward Modelling, Christian H. Henke* and Jannis Makris.


* denotes speaker
Modelling

Chairman: S. Treitel

3D Multivalued Travel Time and Amplitude Maps,
Paulo Sergio Lucio*, Gilles Lambaré and Andrzes Hanyga.

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Acoustic Modelling in Biot Media,
Marco A. Barsottelli Botelho* and Vincente Pinheiro.

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Dynamic Velocity Shift of Waves in 2D and 3D Random Media,
R. Schwarz* and S.A. Shapiro.

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Approximations for Far Ray-Tracing through Layered Anisotropic Media with Velocity Gradients,
P.R. Williamson* and B. Raynaud.

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Numerical Errors Due to Non-Aligned Interfaces in Coarse-Grid Modelling Schemes,
Rune Mittet* and Arild Buland.

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3D Multi-Offset Seismic Modelling Based on Well Logs and Fluid Fill Substitution,
Paul De Beukelaar*, Benott Paternoster, Nathalie Lucet and Vincent Richard.

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Tool for 3D-Mathematical Modelling in CSD-Technique,
V.P. Kovaliev* and V.I. Yeremin.

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Approximate Reflectivity and Transmissivity for Vertically Inhomogeneous Elastic Media,
S.A. Shapiro*, P. Hubral and B. Ursin.

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A Comparative Study of Seismic Modelling Algorithms,
Ioannis Louis*, Antonis P. Vafidis, George A. Karantonis and Aldo L. Vesnaver.

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"Fuzzy Geomodel" Expert System,
E.V. Kovalevsky* and V.I. Kharchenko.

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