

CREWES NEWS

The Consortium for Research in Elastic Wave Exploration Seismology

CAD\$1.16m Award for Seismic Instrumentation

CREWES and Department Researchers are delighted with a CAD\$1,160,000 award towards the purchase of a multicomponent seismic recording system with a minivibe source. The award comes from Alberta Innovation and Science, a department of the Provincial Government. The funds have to be matched through an application to the Canada Foundation for Innovation in order for the funding to be released.



By utilising this award to purchase a 1,000-channel seismic recording system, the University of Calgary and CREWES will help develop the next generation of expertise and methodology for seismic imaging of the Earth's subsurface. The system will be used for research aimed at improving seismic exploration, monitoring, and development programs associated with the energy, environmental, information technology and manufacturing industries.

Visiting Scholar - Dr. Dirk Gajewski



Dr. Dirk Gajewski

CREWES is greatly looking forward to hosting a distinguished sabbatical visitor this year. Dr. Dirk Gajewski of the University of Hamburg is planning to spend about six months with us from May to October, 2001.

Dr. Gajewski has been Associate Professor of Applied Geophysics in the Applied Geophysics Group (<http://www.agg.dkrz.de>) of the Institute of Geophysics, University of Hamburg, since 1993. He has a Ph.D. from Karlsruhe University (1987) and has worked at Stanford University, the Center for Computational Seismology at Lawrence Berkeley Labs in Berkeley, California, and at Clausthal Technical University. He is currently an associate editor, anisotropy section, for *Geophysical Prospecting*.

Dirk's research interests include high-frequency asymptotics, seismic modelling, and processing of seismic data from isotropic and anisotropic media. Together with Ivan Psencik, he developed the ANRAY anisotropic modelling software package. Dirk's Applied Geophysics Group is also a member of the Wave Inversion Technology (WIT) consortium (<http://www-gpi.physik.uni-karlsruhe.de/pub/wit/wit.html>), whose mission is to develop the most accurate and efficient target-oriented modelling and imaging using seismic and acoustic methods.



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Congratulations: Don Lawton



CREWES is delighted to congratulate Associate Director, Dr. Don Lawton on his award of the CSEG Gold Medal for contributions to the teaching of exploration geophysics.

The CSEG Gold Medal was introduced in 1988 and is the highest award that the Society bestows. In part it is "gained through a long-standing significant contribution to the application, teaching or business development of Exploration Geophysics."

CREWES Assists in Coal-bed Methane Project

As natural gas prices stay high and the production of coal-bed methane becomes more economically attractive, CREWES is assisting in the Coal-bed Methane (CBM) project sponsored by the Alberta Geological Survey.

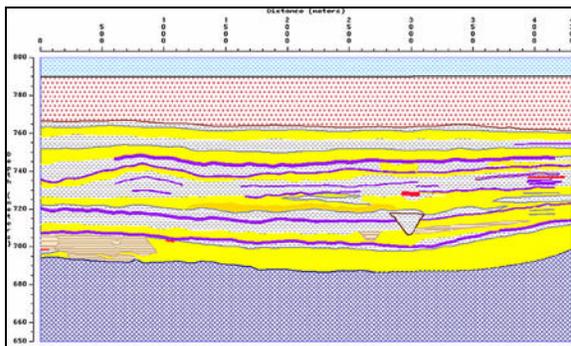


*Sarah Richardson:
assisting with the
CBM Project*

To help us in this project, Sarah Richardson began working with CREWES in February. Sarah graduated in Earth Sciences from Dalhousie University in May 2000. She has taken a year out working before embarking on an M.Sc at the University of Calgary in September.

Sarah is currently modelling the Upper Cretaceous coal seams near Drumheller. A cross-section line has been constructed using stratigraphic columns and panoramic photographs of a valley within the study area. The line's seismic response is being modelled using ray-tracing, both P-P and P-S, to test the feasibility of seismically-imaging the coal beds. One of the project goals is to determine the seismic survey

parameters necessary to best image coal seams to find their thickness and lateral extent. Coal tends to form very thin, discontinuous beds hampering both the seismic imaging of coal seams and CBM production. The results of this study will be relevant to imaging seam-continuity for optimum CBM production.



New Student



Jianli Yang joined CREWES last September from the University of Petroleum, Beijing, where

she gained an M.Sc. Previously, she obtained a B.Sc. in well-logging from the University of Petroleum (East China).

Jianli is starting a second M.Sc with Don Lawton as her supervisor. Her interests include migration in anisotropic media and converted waves. Currently she is working on the numerical-modelling of anisotropic layers using raytracing, and comparing the results with those from physical-modelling surveys.

Revised Contact Details

Readers wishing to contact staff and students should note that all CREWES usernames are attached to the @crewes.org domain.

Making Contact...

The CREWES Project
Dept. of Geology & Geophysics
University of Calgary
2500 University Dr. N.W.
Calgary, Alberta T2N 1N4
CANADA

Fax: (403)284-0074

Email: crewesinfo@crewes.org

WWW: www.crewes.org

Directors:

Dr. Robert Stewart: stewart
Dr. Larry Lines: lines
Dr. Don Lawton: donl
Dr. Gary Margrave: gary

Associated Faculty Members:

Dr. John Bancroft: bancroft

Dr. Larry Bentley: bentley

Dr. Jim Brown: jbrown

Dr. Rudi Meyer: meyer

Administrative Manager:

Louise Forgues: louise

Research Staff:

Henry Bland: henry
Dr. Pat Daley: daley
Eric Gallant: eric
Kevin Hall: khall
Dave Henley: henley
Mark Kirtland: kirtland
Han-Xing Lu: lu
Dr. C. Ursenbach: ursenbac
Dr. Z. Yao: zy

Graduate Students:

Jeff Beckett: beckett
Katherine Brittle: brittle
Louis Chabot: chabot

Jon Downton: downton
Pavan Elapavuluri: pavan
Jeff Grossman: grossman
Victor Iliescu: iliescu
Peter Manning: manning
Michael Mazur: mazur
Yanpeng Mi: mi
Carlos Nieto: nieto
Shauna Oppert: oppert
Marco Perez: perez
Brian Russell: russell
C. Silawongsawat: pensil
Shuang Sun: shuang
Alexandru Vant: vant
Ian Watson: watson
Yan Yan: yyan
Jianli Yang: yang
Hongbo Zhang: h Zhang
Jianlin Zhang: zhang
Ye Zheng: ye
Ying Zou: zou