

The Canadian Remote Sensing Society / La Société canadienne de télédétection



Remote Sensing Awards / Prix en Télédétection

The CRSS administers the following Remote Sensing Awards:

- CRSS Gold Medal Award / Médaille d'or de la SCT
- Val Shaw Memorial Award / Prix Commémoratif Val Shaw
- CRSS Silver Medal Award / Médaille d'argent de la SCT
- CRSS Bronze Medal Award / Médaille de bronze de la SCT
- Canadian Journal of Remote Sensing Prize Paper Award / Prix pour le meilleur article du Journal canadien de télédétection
- Best Symposium Paper / Meilleur article du Symposium
- Best Symposium Presentation / Meilleure présentation du Symposium
- CRSS Conference Travel Grants / Bourses pour frais de déplacement pour une conférence de la SCT
- Student Awards / Prix d'étudiant
 - Best Ph.D. Thesis / Meilleure thèse de doctorat
 - Best Master's Thesis / Meilleure thèse de maîtrise
 - Best Symposium Student Paper / Meilleur article d'étudiant du Symposium
 - Best Symposium Student Presentation / Meilleure présentation d'étudiant du Symposium
 - Undergraduate, Master's and Doctoral Scholarships / Bourses d'études de baccalauréat, de maîtrise et de doctorat
 - CRSS Student Field Research Grants / Bourses d'étudiant pour travail de recherche sur le terrain

APPLICATION INSTRUCTIONS FOR ALL AWARD SUBMISSIONS/NOMINATIONS:

Deadline : All materials must be received by the CRSS Vice-Chair by **APRIL 30, 2009**. All submissions received will be acknowledged by e-mail.

Format: **All materials should be submitted by e-mail** as digital file attachments, preferably in Adobe Acrobat Portable Document Format (.PDF). Other acceptable formats include Rich Text Format (.RTF) and Microsoft Word (.DOC). Official letters of support must be signed and be on company/institutional letterhead. Hardcopy materials should be digitised/scanned to a digital file. Multiple files from a given individual should be saved into one archive file (e.g. .ZIP, .TAR).

Further instructions for specific awards are listed below.

Vice-Chair E-mail address for all submissions :

Dr. Monique Bernier <Monique_Bernier@ete.inrs.ca>

If it is impossible to submit a document in digital form, hardcopy materials may be sent to the address below. Vice-Chair address - to be used only if required:

Dr. Monique Bernier
Vice-Chair CRSS
Professor of Remote Sensing
Institut National de la Recherche Scientifique
Centre Eau, Terre et Environnement
490 de la Couronne, Québec (Québec)
G1K 9A9, CANADA
Tél: 418-654-2585
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Please note: CRSS cannot be responsible for items lost or delayed by mail. Any materials submitted as hardcopy cannot be returned. **All submissions are strongly encouraged by e-mail to: Monique_Bernier@ete.inrs.ca**

CRSS Gold Medal Award / Médaille d'or de la SCT

The **CRSS Gold Medal Award** was introduced in 1986 to recognize either a significant new advance in remote sensing research, development, technology or applications, or a significant long-term contribution to the field of remote sensing in Canada. The Gold Medal is the highest award granted by the Canadian Remote Sensing Society for excellence in remote sensing.

Nomination Process

The candidate must be nominated in writing by two members in good standing of CRSS who have not worked for or with the nominee in a substantive manner during the previous three years. The nomination should clearly describe the candidate's contributions. Additional letters of support and other supporting documentation would help to strengthen the nomination (e.g. curriculum vitae/resumé). Nominees who have received the CRSS Bronze Medal or CRSS Silver Medal in the last 5 years are not eligible. Nominations must be received by the CRSS Vice-Chair by the due date indicated above, and are to **remain confidential from the nominee and others**. The CRSS Executive will review the nominations that are brought forward by the Vice-Chair.

Recipients / Récipiendaires

1986 - Dr. L.W. Morley, Institute for Space and Terrestrial Science
1987 - Mr. E.A. Godby, Canada Centre for Remote Sensing
1989 - Dr. John S. MacDonald, MacDonald, Dettwiler and Associates Ltd
1991 - Dr. Frank J. Ahern, Canada Centre for Remote Sensing
1993 - Dr. Philip J. Howarth, University of Waterloo
1996 - Dr. John R. Miller, York University
1997 - Dr. Edryd Shaw, Canada Centre for Remote Sensing
1999 - Dr. R. Keith Raney, Johns Hopkins University, Applied Physics Laboratory
2000 - Dr. James F.R. Gower, Institute for Ocean Sciences
2001 - Dr. Ferdinand Bonn, Université de Sherbrooke
2002 - Dr. Josef Cihlar, Canada Centre for Remote Sensing
2004 - Dr. David Goodenough, Pacific Forestry Centre
2005 - Dr. Ellsworth F. LeDrew, University of Waterloo
2006 - Dr. Philippe M. Teillet, Canada Centre for Remote Sensing
2007 - Dr. Steven E. Franklin, University of Saskatchewan
2008 - Dr. A. Laurence Gray, Canada Centre for Remote Sensing
[affiliations at time of award]

Val Shaw Memorial Award / Prix Commémoratif Val Shaw

The **Val Shaw Memorial Award** was established in 1990 in memory of Valerie Shaw, an executive with the Bercha Group and a strong proponent of remote sensing in Canada. The award consists of a certificate that recognizes lifelong achievement in practical remote sensing applied to natural resource management.

Val Shaw was a Vice-President of one of the most successful companies active in remote sensing in Canada in the late 1970's and early 1980's and was one of the early leaders in the field. While a worthy competitor in business, she was known for her honesty, dedication to client service, and the fact that she gave generously of her time to students, colleagues, and the many people she touched. Relatively early in life she was suddenly struck down by a virulent form of leukemia. She left four children, who attended the first presentation of the award named in her honour to Dr. Al Gregory at the 14th Canadian Symposium on Remote Sensing in Calgary in 1991.

Nomination Process

The candidate must be nominated in writing by two members in good standing of CRSS who have not worked for or with the nominee in a substantive manner during the previous three years. The nomination should clearly describe the candidate's contributions. Additional letters of support and other supporting documentation would help to strengthen the nomination (e.g. curriculum vitae/resumé). Nominations must be received by the CRSS Vice-Chair by the due date indicated above, and are to **remain confidential from the nominee and others**. The CRSS Executive will review the nominations that are brought forward by the Vice-Chair.

Recipients / Récipiendaires

1991 - Dr. Al Gregory, Gregory Geoscience
1996 - Dr. Peter Murtha, University of British Columbia
2001 - Mr. Jean Beaubien, Service canadien des forêts
2007 - Dr. Francis J. Ahern, TerreVista Earth Imaging

CRSS Silver Medal Award / Médaille d'argent de la SCT

The **CRSS Silver Medal Award** was established in 2008 as a mid-career achievement award to recognise excellence in remote sensing in Canada. Nominations are invited for outstanding candidates from any sector (e.g. industry, government, university) who have made important and sustained contributions to remote sensing in Canada, typically for a period of more than 10 years.

Nomination Process

The candidate must be nominated in writing by two members in good standing of CRSS who have not worked for or with the nominee in a substantive manner during the previous three years. The nomination should clearly describe the candidate's contributions to date. Additional letters of support and other supporting documentation would help to strengthen the nomination (e.g. curriculum vitae/resumé). Nominees who have received the CRSS Bronze Medal in the last 5 years are not eligible. Nominations must be received by the CRSS Vice-Chair by the due date indicated above, and are to **remain confidential from the nominee and others**. The CRSS Executive will review the nominations that are brought forward by the Vice-Chair.

Recipients / Récipiendaires:

CRSS Bronze Medal Award / Médaille de bronze de la SCT

The **CRSS Bronze Medal Award** was established in 2008 as an early-career achievement award to recognise emerging excellence in remote sensing in Canada. Nominations are invited for outstanding candidates from any sector (e.g. industry, government, university) who are 40 years of age or less, as of December 31 of the year of the Award.

Nomination Process

The candidate must be nominated in writing by two members in good standing of CRSS who have not worked for or with the nominee in a substantive manner during the previous three years. The nomination should clearly describe the candidate's contributions to date, and future potential. Additional letters of support and other supporting documentation would help to strengthen the nomination (e.g. curriculum vitae/resumé). Nominations must be received by the CRSS Vice-Chair by the due date indicated above, and are to **remain confidential from the nominee and others**. The CRSS Executive will review the nominations that are brought forward by the Vice-Chair.

Recipients / Récipiendaires:

Canadian Journal of Remote Sensing Prize Paper Award / Prix pour le meilleur article du Journal canadien de télédétection

The **CJRS Prize Paper Award** was created in 2001 to recognise excellence in peer-reviewed publications. The award will be presented during the Canadian Symposium on Remote Sensing for the best paper (published in any category) in the prior year's volume. The CJRS Editorial Board, based upon nominations from reviewers, board members, or CRSS members, recommends the winner to the CRSS Awards Committee. The winner will receive a one-year membership in CASI/CRSS and a certificate.

Recipients / Récipiendaires

2001 - Sverre T. Dokken (Chalmers University of Technology, Gothenburg, Sweden) and co-authors, for a "significant contribution to the development and validation of sea ice remote sensing applications" as published in:

Dokken, S.T., B. Håkansson and J. Askne, 2000. Inter-Comparison of Arctic Sea Ice Concentration Using RADARSAT, ERS, SSM/I and In-Situ Data, *Canadian Journal of Remote Sensing*, 26(6): 521-536.

2002 - A. Laurence Gray (Canada Centre for Remote Sensing, Ottawa) and co-authors, for "a critical assessment of the application of SAR interferometry as an original quantitative SAR interpretation technique to an important and generalised problem" as published in:

Gray, A.L., Short, N., Mattar, K.E., and Jezek, K.C., 2001. Velocities and Flux of the Filchner Ice shelf and its Tributaries Determined from Speckle Tracking Interferometry, *Canadian Journal of Remote Sensing*, 27(3): 193-206.

2005 - Naomi H. Short (Noetix Research Inc., Ottawa) and co-authors, for "an important contribution to RADARSAT image analysis of glacier movement in northern Canada", as published in:

Short, N.H. and A.L. Gray, 2005. Glacier Dynamics in the Canadian High Arctic from RADARSAT-1 Speckle Tracking. *Canadian Journal of Remote Sensing*, 31(3):225-239.

2006 - Darren Janzen (University of Northern British Columbia, Prince George, B.C.) and co-authors, for "an innovative approach to forestry remote sensing image processing and analysis", as published in:

Janzen, D., R. Wheate and A. Fredeen, 2006. Radiometric Correction Techniques and Accuracy Assessment for Landsat TM data in Remote Forested Regions, *Canadian Journal of Remote Sensing*, 32(5): 330-340.

2007 - J.C.B. Da Silva (Universidade de Lisboa, Lison, Portugal) and co-authors, for "a unique use of SAR imagery for ocean remote sensing", as published in:

J.C.B. Da Silva, A.L. New and A. Azevedo, 2007. On the role of SAR for observing "local generation" of internal solitary waves off the Iberian Peninsula. *Canadian Journal of Remote Sensing*, 33 (5):388-403.

**Best Symposium Paper and Best Symposium Presentation /
Meilleur article du Symposium et Meilleure présentation du Symposium**

Awards may be given for the **Best Symposium Paper** and the **Best Symposium Presentation** at each Canadian Symposium on Remote Sensing. To be eligible, the paper must appear in the proceedings and the work must be presented by one of the authors. The papers and presentations will be judged by an Awards Committee in terms of significance and research quality. The winner will receive a certificate.

Recipients / Récipiendaires

Best Symposium Paper / Meilleur article du Symposium

2000 – Jeff A. Dechka (GeoAnaytic Inc.), D.R. Peddle (University of Lethbridge), S.E. Franklin (University of Calgary), and G.B. Stenhouse (Foothills Model Forest): "Grizzly Bear Habitat Mapping Using Evidential Reasoning and Maximum Likelihood Classifiers: A Comparison".

2001 - Philippe M. Teillet (CCRS), D.L. Helder (South Dakota State University), B.L. Markham, J.L. Barker (NASA GSFC), K.J. Thome (University of Arizona), R. Morfitt (USGS EROS Data Center), J.R. Schott (Rochester Institute of Technology), and F.D. Palluconi (JPL): "A Lifetime Radiometric Calibration Record for Landsat Thematic Mapper".

Recipients / Récipiendaires

Best Symposium Presentation / Meilleure présentation du Symposium

2000 - E. Fillol , A. Royer (Université de Sherbrooke), C. Caya, R. Laprise et A. Frigon (Université du Québec à Montréal) : "Comparaison des variations de la température de surface dérivée des données satellitaires NOAA-AVHRR et du modèle CRCM"

2001 - Jérôme Théau and C.R. Duguay (Université Laval). "Mapping the Degradation of the George River Caribou Herd Summer Habitat with Landsat Data".

CRSS Conference Travel Grants

The **CRSS Conference Travel Grants** were established in 2008 to encourage early career professionals and/or students enrolled at a Canadian university or college to attend the Canadian Symposium on Remote Sensing. Up to two Travel Grants of \$500 each may be awarded per year. These awards are intended for those who otherwise would not have the opportunity and/or sufficient resources to attend the Conference, either from personal funds, or from their industry, government, or university sponsor if applicable [e.g. entry-level employee/intern, undergraduate student]. The Grant recipient(s) will be reimbursed for up to \$500 each for valid Conference costs such as travel, registration, lodging, meals etc.

Eligibility

You must be a member in good standing of CRSS at the time of application (or have submitted an application for membership, which can be processed with the Travel Grant application). There is no requirement for the Travel Grant applicant to present a paper at the conference.

Application process

Submit the following materials to the CRSS Vice-Chair by the deadline:

(a) A letter from the applicant stating your current status (e.g. employed in industry, government, or a student – include program and year), the length of time involved with remote sensing (e.g. employment, or student coursework), the name of the immediate supervisor (if applicable), and a statement of interest in remote sensing, and your reasons to attend the Symposium with respect to future career plans.

(b) A current curriculum vitae (CV) or resumé of the applicant

(c) An itemised budget for attending the conference (e.g. estimated cost of travel, registration, lodging, meals), including source(s) of matching funds to top-up the award to cover full costs as required.

(d) A brief letter of reference from the applicant's supervisor (if applicable, e.g. employer, or graduate student supervisor), including the availability of matching support, and the opportunity the award would create for the applicant. If appropriate, the supervisor (e.g. industry employer) should also indicate their willingness to provide the applicant's time to attend the conference as a professional development activity. In the case of undergraduate students who do not have a supervisor, a letter of support from a remote sensing course instructor is recommended, but is not required. To ease the administrative burden, the letter of reference can be provided simply as a brief e-mail message to the CRSS Vice-Chair.

Recipients / Récipiendaires

2008 - Thai-Nguyen Nguyen, Carleton University

Student Awards / Prix d'étudiant

Best Master's Thesis and Best Ph.D. Thesis / Meilleure thèse de maîtrise et Meilleure thèse de doctorat

The CRSS may issue **Student Awards** for the best theses at the Master's and Ph.D. levels. The recipients of these Awards will receive a Certificate and will be invited to present the results of their thesis at the following Canadian Symposium on Remote Sensing. Symposium registration will be complimentary.

Eligibility

The candidate must have been a student at a Canadian university for their graduate studies. The candidate must have successfully defended their thesis and submitted it in final form to their university. The year of eligibility for a given thesis is determined by the year of copyright © printed on the title page of the final (bound) thesis. The current competition is open to theses with the copyright year in the previous full calendar year before the deadline [i.e. Jan 1 – Dec. 31 of the year preceding the deadline].

Nomination process

The nomination must be made in writing by the thesis supervisor or Department Head/Chair. Only one thesis, per department or administrative unit, in each of the post-graduate levels, will be considered, with any internal selections being the responsibility of the department/unit concerned. The nomination must explain the merit of the work and must include the final thesis as a digital .PDF file (identical to the hardbound thesis), including title page with copyright © year and any approval signatures. Nominations must be received by the Vice-Chair of CRSS by the due date indicated above, and are to **remain confidential from the nominee and others**.

Recipients / Récipiendaires Best Ph.D. Thesis / Meilleure thèse de doctorat

1989 - Jinfei Wang, "A new automated Linear-feature Network Detection and Analysis (LINDA) System and its applications", Department of Geography, University of Waterloo (Phil Howarth, Supervisor).

1992 - Grant A. Bracher, "Detection of Nutrient Stress in Douglas-Fir Seedlings using Spectroradiometer Data", Faculty of Forestry, University of British Columbia (Peter A. Murtha, Supervisor).

1997 - Derek R. Peddle, "Remote Sensing of Boreal Forest Terrain: Sub-Pixel Modeling of Land Cover and Biophysical Parameters at Forest Stand and Regional Scales", Department of Geography, University of Waterloo (Ellsworth LeDrew, Supervisor).

2000 - H. Peter White, "Investigations of Boreal Forest Bi-directional Reflectance Factor (BRF)", Department of Physics and Astronomy, York University (John Miller, Supervisor).

2001 - Pablo J. Zarco-Tejada, "Hyperspectral Remote Sensing of Closed Forest Canopies: Estimation of Chlorophyll Fluorescence and Pigment Content", Department of Earth and Space Science, York University (John Miller, Supervisor).

2002 - Robin Qiaofeng Zhang, "Spatial, Spectral and Temporal Analysis of Urban Landscape Dynamics Using Optical Satellite Data", Department of Geography, University of Western Ontario (Jinfei Wang, Supervisor).

2005 - Arnaud Mialon, "Étude de la variabilité climatique des hautes latitudes nord, dérivée d'observations satellites micro-ondes", Département de géomatique appliquée, Université de Sherbrooke (Alain Royer Université de Sherbrooke et Michel Fily, Université Josef Fourier, Grenoble France, Supervisors)

2006 - Valerie A. Thomas, "Spatially explicit modelling of forest structure and function using airborne lidar and hyperspectral remote sensing data combined with micrometeorological measurements", Department of Geography, Queen's University (Paul Treitz and Harry McCaughey, Supervisors)

2007 - Yongqin (Lisa) Zhang, "Hyperspectral remote sensing algorithms for retrieving forest chlorophyll content", Department of Geography, University of Toronto (Jing Chen, Supervisor)

Recipients / Récipiendaires

Best Master's Thesis / Meilleure thèse de maîtrise

1989 - Joan E. Luther, "Terrain Classification using Landsat Thematic Mapper and Digital Topographic Data in the Burwash Uplands, Southwest Yukon", Department of Geography, Memorial University of Newfoundland (Steven Franklin, Supervisor).

1990 - Richard Fournier, "3-Dimensional Modelling of Forest Canopies for High Resolution Imagery", Department of Earth and Space Science, York University (John Miller, Supervisor).

1995 - Ray Soffer, "Bidirectional Reflectance Factors of an Open Tree Canopy by Laboratory Simulation", Department of Earth and Space Science, York University (John Miller, Supervisor).

1997 - Mike Wulder, "Airborne Remote Sensing of Forest Structure: Estimation of Leaf Area Index", Department of Geography, University of Waterloo (Ellsworth LeDrew, Supervisor).

1999 - Kris Innanen, "Approaches to the Direct Extraction of Forest Canopy Variables from High-Spatial Resolution Winter Reflectance Imagery", Department of Physics and Astronomy, York University, (John Miller, Supervisor).

2000 - Ryan L. Johnson, "Airborne Remote Sensing of Forest Leaf Area in Mountainous Terrain, Kananaskis Alberta", Department of Geography, University of Lethbridge (Derek Peddle, Supervisor).

2001 - Alice Deschamps, "Characterization of Modern Reefs using the Atlantic and Gulf Rapid Reef Assessment (AGRRA) Protocol and Digitized aerial photographs, Tobago Cays Marine Park, St. Vincent and the Grenadines", Department of Earth Sciences, University of Ottawa (André Desrochers, Supervisor).

2002 - Catherine M. Champagne, "Remote Sensing of Plant Water Content for Precision Agriculture: The Potential for Hyperspectral Modelling.", Department of Geography, University of Ottawa (Abdou Bannari and Karl Staenz, Supervisors).

2003 – Nicole J. Rabe, "Remote Sensing of Crop Biophysical Parameters for Site-Specific Agriculture.", Department of Geography, University of Lethbridge (Derek Peddle, Supervisor).

2005 - Jonathon Pasher, "Modelling and Mapping Potential Hooded Warbler (*Wilsonia Citrina*) Habitat Using Remote Sensing", Department of Geography and Environmental Studies, Carleton University (Doug King and Kathryn Lindsay, Supervisors)

2006 – Scott A. Soenen, "Remote Sensing of Montane Forest Structure and Biomass: A Canopy Reflectance Model Inversion Approach", Department of Geography, University of Lethbridge (Derek Peddle, Supervisor).

2007 (tie) – David Alfred, " Semi-automated rooftop identification from high spatial and spectral resolution spaceborne remote sensing imagery", Department of Geography, University of Western Ontario (Jinfei Wang, Supervisor)

2007 (tie) – Peter Eddy, " Development of remote sensing techniques for the implementation of site specific herbicide management ", Department of Geography, University of Lethbridge (Anne Smith and Derek Peddle, Supervisors).

Best Symposium Student Paper and Best Symposium Student Presentation / Meilleur article d'étudiant du Symposium et Meilleure présentation d'étudiant du Symposium

Awards may be given for the **Best Symposium Student Paper** and **Best Symposium Student Presentation** (oral and/or poster) at each Canadian Symposium on Remote Sensing. To be eligible, the paper must be presented and prime-authored by a student, although multi-authored papers will be considered. The papers and presentations will be judged by an Awards Committee in terms of significance and research quality for both the written version and the oral or poster presentation. The winner will receive a certificate, registration for the next Canadian Symposium on Remote Sensing, and in some cases, a cash prize.

Recipients / Récipiendaires

Best Symposium Student Paper / Meilleur article d'étudiant du Symposium

1995 - **D.R. Peddle** (University of Waterloo), F.G. Hall (NASA Goddard Space Flight Centre) and E.F. LeDrew (University of Waterloo): "Spectral Mixture Analysis and Geometric-Optical Reflectance Modeling of Boreal Forest Biophysical Structure, Superior National Forest, Minnesota".

2000 - B. Rivard and **R. Bechtel** (University of Alberta): "Spectral Properties of Foliose and Crustose Lichens Based on Laboratory Experiments".

2001 - **K. Lim** (Queen's University), P. Treitz (Queen's University), A. Groot (Canadian Forest Service), and B. St-Onge (Université du Québec à Montréal): "Estimation of Individual Tree Heights Using LiDAR Remote Sensing".

2007 – Award sponsored by Union Radio-Scientifique Internationale (URSI): \$500.00

S.A. Soenen (University of Lethbridge), D.R. Peddle (Univ. Lethbridge), R.J. Hall (Canadian Forest Service and Univ. Lethbridge), and C.A. Coburn (Univ. Lethbridge): “Multiple Forward Mode Canopy Reflectance Model Inversion for Above Ground Forest Biomass, Alberta Rocky Mountains”.

Recipients / Récipiendaires

Best Symposium Student Presentation / Meilleur présentation d'étudiant du Symposium

2007 – 28th CSRS: Ottawa. Award sponsored by PCI Geomatics: \$500.00

M. François Vachon (Université de Sherbrooke), K. Goïta (Univ. de Sherbrooke), D. De Sève (IREQ), A. Royer (Univ. de Sherbrooke), “Snow water equivalent retrieval in a sub-arctic environment of the North of Quebec from space-borne passive microwave observations”: (Best Student Oral Presentation (tie): \$200.00)

Peter R. Eddy (University of Lethbridge), A.M. Smith (Agriculture and Agri-Food Canada [AAFC] and Univ. Lethbridge), B.D. Hill (AAFC), D.R. Peddle (Univ. Lethbridge), C.A. Coburn (Univ. Lethbridge) and R.E. Blackshaw (AAFC). “Improved Site-Specific Herbicide Management using Artificial Neural Networks and Hyperspectral Image Data”. (Best Student Oral Presentation (tie): \$200.00)

Maria Dissanska (INRS-ETE), M. Bernier (INRS-ETE), S. Payette (Univ. Laval) “Study of peatlands aqualyse in the area of the hydroelectrical Complex LaGrande using very high resolution satellite panchromatic images”.(Best Student Poster Presentation: \$100.00)

2008 – 29th CSRS: Whitehorse, Yukon. \$500.00

Martha K. Reynolds, University of Alaska. “The effect of landscape age on circumpolar distribution of Artic vegetation”. (Best Student Oral Presentation (tie): \$150.00)

Thoreau R. Tooke, University of British Columbia. “A ground-based classification scheme for interpreting satellite derived urban vegetation characteristics”. (Best Student Oral Presentation (tie): \$150.00)

Erin D. Trochim, University of Alaska. "Examining the relationships between Themokarst and headwater Drainage Network using Remote Sensing in the Upper Kupuruk Basin". (Best Student Poster Presentation (tie): \$100.00)

Claude Codja Université du Québec à Montréal. “Méthode empirique de correction des effets cardinaux sur les images RADARSAT-1 portant sur le milieu urbain”. (Best Student Poster Presentation (tie): \$100.00)

CRSS Undergraduate, Master's and Doctoral Scholarships

The **CRSS Undergraduate, Master's and Doctoral Scholarships** were established in 2008 to recognise excellence in remote sensing and to encourage students enrolled at a Canadian university or college to continue their studies in this field. Up to 3 Scholarships may be awarded

each year. Each award will be \$500, with one scholarship each awarded to students pursuing (1) an undergraduate degree, (2) a Master's degree, and (3) a Doctoral degree. In addition to the cash award, recipients will also receive a one-year complimentary junior membership in the Canadian Remote Sensing Society, and a one-year subscription to the Canadian Journal of Remote Sensing.

Eligibility

You must be a member in good standing of CRSS at the time of application (or have submitted an application for membership, which can be processed with the Scholarship application). The Scholarships will be open to students registered in an appropriate (accredited) undergraduate or graduate program at a Canadian university or college. Undergraduate applicants will normally have completed at least one course with a significant remote sensing component, and have plans to continue their remote sensing education. Previous award winners at a given level are not eligible to receive the same award again (e.g. if you have received the undergraduate scholarship, you are ineligible for the undergraduate scholarship in subsequent years). Students may, however, receive a CRSS Scholarship at a different level than a previous award (e.g. a previous undergraduate scholarship recipient is eligible for the Master's or Doctoral Scholarship).

Only one submission per level from each department or administrative unit within a university or college will be considered, with any internal selections being the responsibility of the department or administrative unit concerned. Prospective applicants should consult with their faculty supervisors prior to commencing an application.

Application process

Submit the following materials to the CRSS Vice-Chair by the deadline:

(a) A letter from the applicant stating your current student status (include program and year, and award being applied for), the length of time involved with remote sensing (e.g. employment and/or coursework), the name of the immediate supervisor (if applicable), and a statement of interest in remote sensing and the Scholarship with respect to future career plans. Your letter should also highlight remote sensing-related educational accomplishments, projects, and/or any research accomplishments.

(b) A current curriculum vitae (CV) or resumé of the applicant.

(c) Sealed official transcript(s) from all post-secondary institutions attended. The transcripts from the applicant's current institution must be up to date and indicate current registration in good standing.

(d) A signed letter of support from a faculty member of the student's present (or past) university/college who is familiar with the applicant's remote sensing work and capabilities. The letter should clearly state why the student is deserving of a remote sensing scholarship. The letter must be submitted directly from the faculty member, preferably by e-mail with the letter as an attached document that must contain institutional letterhead and a digital signature (otherwise submit hardcopy by mail or fax).

(e) (Optional) The student applicant may also provide selected additional supporting material, such as project reports, research papers, etc.

Recipients / Récipiendaires

2008 Doctoral Scholarship - Jacqueline Kohn, CARTEL, Université de Sherbrooke

2008 Master's Scholarship - Jean-Denis Giguère, CARTEL, Université de Sherbrooke

2008 Undergraduate Scholarship - Doris Lam, York University

CRSS Student Field Research Grants

The **CRSS Student Field Research Grants** were established in 2008 to help offset the high costs of field research in support of student remote sensing research. Up to three grants may be awarded each year. Each grant is valued at \$1000 and will be awarded based on merit of the proposed research and field needs. The grant will partially offset field validation costs in support of a remote sensing based post-graduate thesis, senior undergraduate honours thesis/dissertation or internship major project being undertaken at a Canadian university or college. The recipients of these grants must provide a brief written report on the associated field activities and use of funds, and are expected to present their research findings at a future Canadian Symposium on Remote Sensing for which symposium registration will be complimentary.

Eligibility

The student applicant must be a member of CRSS in good standing at the time of application (or have submitted an application for membership, which can be processed with the Student Field Research Grant application). The student must also be registered in an appropriate (accredited) graduate program or senior undergraduate honours dissertation/thesis course/program at a Canadian university or college, and be working towards a thesis or internship major project that has a significant remote sensing component. For doctoral students, the applicant must have either successfully defended their Ph.D. comprehensive exam or had their thesis/internship project proposal approved by their supervisor. A Student Field Research Grant will only be awarded to a student who is about to embark on field work to support their graduate research. The grant is not retroactive to cover the costs of prior field work nor is it meant for non-thesis or other projects. Only one submission from each department or administrative unit within a university or college will be considered, with any internal selections being the responsibility of the department/unit concerned. Prospective applicants should consult with their faculty supervisors prior to commencing an application.

Application process

Submit the following materials to the CRSS Vice-Chair by the deadline:

(a) A covering letter from the student applicant demonstrating how the eligibility criteria are met.

(b) A two page proposal written by the student applicant (i.e. not the supervisor or others) that summarizes: the research question; field validation methodology; field work budget; and the significance of the anticipated results.

(c) A current curriculum vitae (CV) or resumé of the student applicant.

(d) A signed letter of reference from the student's supervisor, commenting on the applicant as well as the broader context of the research and field requirements. The letter must be submitted directly from the faculty member, preferably by e-mail with the letter as an attached document that must contain institutional letterhead and a digital scanned signature (otherwise submit hardcopy by mail or fax).

Recipients / Récipiendaires

2008 - Caroline Rivest, Université de Sherbrooke

2008 - Trevor Gareth-Jones, University of British Columbia