

## Technical Sessions February 5, 2010

Venue: Hotel Hindustan International, Maldahiya, Varanasi

### Oral Presentations

**Themes:** **I. Regional maps of dyke swarms and related magmatic units**  
**II. Dykes as plumbing system for Large Igneous Provinces and**  
**III. Giant dyke swarm and Supercontinents**

#### Chairpersons:

Arora, B. R., Prof.  
 Gupta, Harsh K., Prof.  
 Halls, Henry, Prof.

Time (in hrs)	Title of paper	Author(s)
9.00-9.25	<b>Keynote address:</b> The anatomy of large dyke swarms: geometrical constraints on ancient break-up events	<b><u>Bleeker, Wouter</u></b> and Ernst, R. E.
9.25-9.50	<b>Keynote address:</b> Importance of Mafic Dyke Swarms in Tracing the Tectonic Histories of Continents and Their Building Blocks	<b><u>Pesonen, L. J.</u></b>
9.50-10.15	<b>Keynote address:</b> A new 'puzzle piece' for Superia? Baddeleyite U-Pb dating of regional dolerite dyke swarms and sill complexes in Zimbabwe	<b><u>Söderlund, Ulf</u></b> , Hofmann, A., Klausen, M., Olsson, J., Ernst, R. E. and Persson, P. O.
10.15-10.30	Paleomagnetism and U-Pb baddeleyite dating of the Melville Bugt and Ataa Sund dykes, Greenland	<b><u>Halls, H. C.</u></b> , Hamilton, M. A. and Denyszyn, S. W.
10.30-10.42	Proterozoic record of Large Igneous Provinces (LIPs) of Indian shield: evidence from mafic dyke swarms and related magmatic units	Ernst, R. E. and <b><u>Srivastava, Rajesh K.</u></b>
10.42-10.55	Geochronological and geochemical evidence for the manifestation of the Deccan Traps and related dykes in the Chhattisgarh Basin and Bastar Craton, Central India: implication for the origin and spatial extent of the Deccan Large Igneous Province	<b><u>Chalapathi Rao, N. V.</u></b> , Lehmann, B., Burgess, R., Pande, S. and Hari, K. R.

10.55-11.30	<b>Tea-break</b>	
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**Themes:** **I. Regional maps of dyke swarms and related magmatic units,**  
**II. Dykes as plumbing system for Large Igneous Provinces and**  
**III. Giant dyke swarm and Supercontinents – Contd.**

#### Chairpersons:

Pesonen, Lauri, Prof.  
 Ramakrishnan, M., Dr.  
 Sharma, R. S., Prof.

Time (in hrs)	Title of paper	Author(s)
11.30-11.55	<b>Keynote address:</b> Using the Global Dolerite Dyke Swarm Record to Reconstruct Supercontinents Back to 2.7 Ga	Ernst, R. E., <b><u>Bleeker, Wouter</u></b> , Söderlund, U., Hamilton, M. A., Sylvester, P. J. and Chamberlain, K. R.

11.55-12.07	Ethiopian flood basalt province: The Somali Dyke Swarm	<b><u>Mège, Daniel</u></b> and Purcell, P.
12.07-12.20	Proterozoic mafic dyke swarms of the Siberian craton: an overview and paleogeodynamic constraints	<b><u>Gladkochub, Dmitry P.</u></b> , Ernst, R. E., Pisarevsky, S. A., Donskaya, T. V., Wingate, M. T. D., Söderlund, U., Mazukabzov, A. M., Sklyarov, E. V., Hamilton M. A. and Hanes, J. A.
12.20-12.32	The Palaeoproterozoic Uauá Mafic Dyke Swarm, São Francisco Craton, Brazil and implications for orogen reconstruction	<b><u>Oliveira, Elson P.</u></b>
12.32-12.44	Geochemistry and petrology of breakup-related mafic dyke swarms along the western margin of southern Africa: a progress report	<b><u>Trumbull, Robert B.</u></b> and Reid, D. L.
12.44-12.56	The 1210 Ma Marnda Moorn LIP: potential links with the Pinjarra Orogen and Musgrave Province	<b><u>Wingate, Michael T. D.</u></b> and Howard, H. M.
12.56-13.08	<sup>40</sup> Ar- <sup>39</sup> Ar whole-rock and U-Pb baddeleyite dating of Permian and Carboniferous dolerite dykes in Scania (southern Sweden), and their relation to Pangea post collisional processes	<b><u>Bergelin, Ingemar.</u></b> Karsten Obst, Mike Hamilton and Ulf Söderlund
13.08-13.20	Emplacement of Dyke Swarms, Dyke Clusters and Dykes during Cretaceous Period in Peninsular India	<b><u>Misra, K. S.</u></b> and Misra, A.
13.20-13.30	Palaeoproterozoic dykes of India in supercontinent assembly of Columbia: Insight from the analysis of palaeomagnetic database	<b><u>Mohanty, S. P.</u></b>

13.30-14.30	<b>Lunch-break</b>
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**Theme: IV. Geophysics of dykes**

**Chairpersons:**

Gaur, V. K., Prof.

Hamilton, Mike, Prof.

Mertanen, Satu, Dr.

Time (in hrs)	Title of paper	Author(s)
14.30-14.55	<b>Keynote address:</b> Paleomagnetism and U-Pb geochronology from the western end of the Grenville dyke swarm and the question of True Polar Wander during the Ediacaran	<b><u>Halls, H. C.</u></b> , Lovette, A., Soderlund, U. and Hamilton, M. A.
14.55-15.15	<b>Invited talk:</b> Anisotropy of the Indian lithospheric mantle	<b><u>Gaur, V. K.</u></b>
15.15-15.35	<b>Invited talk:</b> Seismic Signature of the lost Tethys Sea in the Mantle Transition Zone under Southern India	<b><u>Rai, S. S.</u></b>
15.35-15.47	New paleomagnetic investigations on the Mesoproterozoic Kopparnas dolerite dyke swarm in the Fennoscandian Shield	<b><u>Mertanen, Satu</u></b>
15.47-16.00	Magnetic fabric and palaeomagnetic investigations on the intrusive of Karanja Island, east of Mumbai, India: implications for the magma flow direction and their ages	<b><u>Patil, S. K.</u></b>

16.00-16.30	<b>Tea-break followed by Three parallel Poster sessions</b>
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## Poster Presentations: 5<sup>th</sup> February 2010

### Poster Session I

#### Chairpersons:

Hagstrum, Jonathan, Dr.

Misra, K. S., Dr.

Sivaji, Ch., Dr.

- Themes:**
- I. Regional maps of dyke swarms and related magmatic units**
  - II. Dykes as plumbing system for Large Igneous Provinces**
  - III. Giant dyke swarm and Supercontinents**

Poster #	Time (in hrs)	Title of paper	Author(s)
5-I-1	16.30-16.35	Map of Proterozoic Magmatic Events in the Slave Craton, Wopmay Orogen and Environs, Canadian Shield	Buchan, K. L., Ernst, R. E., <b>Bleeker, Wouter</b> , Davis, W. J., Villeneuve, M., van Breemen, O., Hamilton, M.A. and Söderlund, U.
5-I-2	16.35-16.40	Progress Report: Map of Dolerite Dyke Swarms, Related Units and Related Ore Deposits of Russia and Selected Adjacent Regions	<b>Ernst, Richard E.</b> and OTHERS
5-I-3	16.40-16.45	Was Deccan Volcanism Triggered by Antipodal Focusing of Seismic Energy from a Large-Body Impact at ~68 Ma in the Paleo-Pacific Ocean?	<b>Hagstrum, Jonathan T.</b>
5-I-4	16.45-16.50	The Reguibat Shield, Mauritania: a dyke swarm bonanza!	<b>Halls, Henry C.</b>
5-I-5	16.50-16.55	Ethiopian flood basalt province: 1. Dyke Swarms of northwestern Ethiopia	<b>Mège, Daniel</b> , Arnaud, N., Diot, H., Korme, T. and Schultz, R. A.
5-I-6	16.55-17.00	Dyke Swarms around Proterozoic Basins of Peninsular India	<b>Misra, K. S.</b> and Misra, A.
5-I-7	17.00-17.05	Mafic dyke swarms of central Indian shield: implications for a pre-Rodinia supercontinent assembly	<b>Mondal, M. E. A.</b> , Hussain, M. F. and Ahmad, T.
5-I-8	17.05-17.10	The ~1.9 Ga Kandra differentiated dykes: evidence for a probable Large Igneous Province at the eastern margin of the Eastern Dharwar Craton, SE India	<b>Ravikant, Vadlamani</b> and Wu, F.
5-I-9	17.10-17.15	Mafic dykes related to the early stages of rifting along the Benue trough, Nigeria	<b>Ekwueme, Barth N.</b>

### Poster Session II

#### Chairpersons:

Bleeker, Wouter, Dr.

Patil, S. K., Dr.

Rai, S. S., Prof.

- Themes:**
- I. Geophysics of dykes**
  - II. Emplacement mechanism of dykes**
  - III. Geochronology of dykes**

Poster #	Time (in hrs)	Title of paper	Author(s)
5-II-1	16.30-16.35	The use of hand-held magnetic susceptibility meters in the field: an invaluable tool in regional studies of dyke swarms	<b>Bleeker, Wouter</b>
5-II-2	16.35-16.40	Palaeomagnetic and Low field AMS studies on the intrusives from the northern part of Bastar Craton, India	<b>Patil, S. K.</b> , Nishad, R. K., Kumaravel, V. and Datta Manikar

5-II-3	16.40-16.45	Palaeomagnetic study of Kimberlite Dykes from Eastern Dharwar Craton, India	<b><u>Venkateshwarlu, M.</u></b>
5-II-4	16.45-16.50	Stress analysis of mafic dykes in Pithoragarh area, Kumaun Lesser Himalaya, India	<b><u>Singh, R. A.</u></b> , Surdas Singh, N. and Santosh Kumar
5-II-5	16.50-16.55	Geochronological (Rb-Sr and Sm-Nd) and isotope geochemical (Sr and Nd) studies on intrusive gabbros and dolerite dykes from Northern and Central Indian Cratons: implications for the age of onset of sedimentation in Bijawar and Chhattisgarh Basins and uranium exploration	<b><u>Pandey, U. K.</u></b> , Sastry, D. V. L. N., Pandey, B. K., Roy, M., Rawat, T. P. S., Ranjan, R. and Srivastava, V. K.
5-II-6	16.55-17.00	Application of simultaneous DWT and CWT for analysis of complex dyke structures	<b><u>Ahmadi, Mohamad Ali</u></b> and Namaki, L.
5-II-7	17.00-17.05	Palaeomagnetism and $^{40}\text{Ar}/^{39}\text{Ar}$ Geochronology of Proterozoic mafic dykes from the southern margin of Cuddapah Basin, India	<b><u>Goutham, M. R.</u></b> , Subbarao, K. V., Prasad, C. V. R. K., Piper, J. D. A. and Miggins, D. P.
5-II-8	17.05-17.10	Relative chronology of dykes emplacement in the Central Cameroon shear zone (Central Africa): evidence of combined viscous and solid-state deformation during deep crustal shear evolution	<b><u>Njonfang, Emmanuel</u></b> , Ngako, V., Kwekam, M. and Moreau, C.
6-I-9	17.10-17.15	Paleomagnetic studies on the 2.4-2.0 Ga diabase dyke swarms in Karelia – implications to the Superia supercontinent	<b><u>Salminen, J.</u></b> , Halls, H., Mertanen, S., Vuollo, J. and Pesonen, L.

### Poster Session III: 5.2.2010

#### Chairpersons:

Balaram, V., Dr.

Devaraju, T. C., Prof.

Vuollo, Jouni, Dr.

**Theme: Synplutonic mafic dykes**

**Theme: Dyke swarms and planetary bodies**

**Theme: Links to mineralization**

**Theme: Miscellaneous**

Poster #	Time (in hrs)	Title of paper	Author(s)
5-III-1	16.30-16.35	Synplutonic mafic dykes and their interaction with surrounding granitoids in some terrains of northern Karnataka, India	<b><u>Prabhakar, B. C.</u></b> and Jayananda, M.
5-III-2	16.35-16.40	Ladakh Igneous Province, northwest Indian Higher Himalaya is a MASLI system: Evidences from microgranular enclaves and synplutonic mafic dykes	<b><u>Santosh Kumar</u></b>
5-III-3	16.40-16.45	Dyke emplacement on Triton and Pluto: Theoretical musing prior to New Horizons flyby of Pluto and Charon	<b><u>Mège, Daniel</u></b> and Tobie, G.
5-III-4	16.45-16.50	Large-scale crustal extension and volcanism in Lada Terra, Venus	<b><u>Senthil Kumar, P.</u></b> and Head, J. W.
5-III-5	16.50-16.55	Petrology and age of unusual carbonate-bearing granitoid dykes from southern India: evidence for direct source to gold-pyrite hydrothermal veins of the Wynad gold field	<b><u>Pruseeth, K. L.</u></b> , Ravikant, V., Varghese, S. and Krishnamurthi, R.
5-III-6	16.55-17.00	Middle Proterozoic tholeiitic dykes in Gulcheru quartzites and its role in uranium mineralization in south-western margin of Cuddapah Basin, India	<b><u>Rai, A. K.</u></b>
5-III-7	17.00-17.05	Dykes of Buddinni gold deposit, Hutti-Maski greensone	<b><u>Sangurmath, Prabhakar</u></b>

		belt, Karnataka, India	
5-III-8	17.05-17.10	Fluid induced metamorphism in a suite of mafic dykes from Palaeoproterozoic Mahakoshal Group, Central India	<b><u>Chakraborty, Kasturi</u></b> , Sanyal, S. and Sengupta, P.
5-III-9	17.10-17.15	Groundwater storage in basaltic dyke fractures and termite mound viability	<b><u>Mège, Daniel</u></b> and Rango, T.
5-III-10	17.15-17.20	Geochemistry and petrogenesis of the Urumia-Dokhtar volcanics around Nain and Rafsanjan areas, Central Iran: a preliminary study	<b><u>Monireh, Poshtkoohi</u></b>
5-III-11	17.20-17.25	Evaluation of Felsite, Felsite porphyry and dolerite dyke occurrences for Commercial exploitation as Dimension stone, around Bannur- T Narasipur area, Mysore district, Karnataka state, India	<b><u>Chandrashekharaiah, K. C.</u></b>
5-III-12	17.25-17.30	Proterozoic dyke swarms of Chittor district, Andhra Pradesh and their economical importance as dimensional stones	<b><u>Hanumanthu, R. C.</u></b> , Mallikharjuna Rao, J., Subba Rao, D. V. Shankar, D. B. and Sivanadha Reddy, G.
5-III-13	17.30-17.35	Geodynamic significance of Leucogranite intrusions in the Lohit batholith near Walong, Eastern Arunachal Pradesh, India	<b><u>Goswami, T. K.</u></b>
5-III-14	17.35-17.40	The Parishan pluton in Qorveh area, an example for mingling of felsic magma and mafic dykes, southeastern Sanandaj, Iran	<b><u>Torkian, Ashraf</u></b>
5-III-15	17.40-17.45	Hutti - a world class gold deposit between two major dolerite dykes, in the Achaean Green Stone belts of Karnataka, India	<b><u>Patil, M. L.</u></b>