

## Technical Sessions February 6, 2010

Venue: Hotel Hindustan International, Maldahiya, Varanasi

### Oral Presentation

**Theme: V. Petrology, geochemistry and petrogenesis of dykes**

#### Chairpersons:

Dasgupta, Somnath, Prof.

Mitchell, Roger, Prof.

Paul, D. K., Prof.

Time (in hrs)	Title of paper	Author(s)
8.30-8.55	<b>Keynote address:</b> Can alkaline magmatism destroy a craton? Lessons learned from the Greenland-Labrador diamond province	<b>Tappe, Sebastian</b> and Heaman, L. M.
8.55-9.15	<b>Invited talk:</b> Mafic magmatism in western Himalaya: evidence for continental rifting to arc magmatism	<b>Ahmad, Talat</b>
9.15-9.27	Mafic dykes of Rewa Basin, Central India: implications on evolution and migration of Deccan magma	Lala, T., Chaudhary, A. K., Patil, S. K. and <b>Paul, D. K.</b>
9.27-9.39	Origin of internal zonation in mafic dykes of the Åland-Åboland Dyke Swarm, Torsholma island, SW Finland	<b>Chistvakova, Sofya</b> and Latypov, R.
9.39-9.51	Basaltic-sill – sedimentary sequences in the Kaczawa Mountains, SW Poland: evidence of Cambrian/ Ordovician initial rifting at Gondwana margin	<b>Kryza, Ryszard</b>
9.51-10.03	Geochemistry and Geochronology of Basic Dykes, Mikir Hills Assam, India	<b>Dhurandhar, A. P.</b> , Umamaheswar, K., Zakaulla, S., Raminaidu, Ch. and Pandey, U. K.
10.03-10.15	Mineralogy, Petrology and multi-element Geochemistry of the unusual Cretaceous ultramafic-mafic-felsic-alkaline dyke swarms associated with Girnar Igneous Complex and Deccan Continental Flood Basalts of Southern Saurashtra, Western India	<b>Subba Rao, D. V.</b> , Balaram, V. and MadhuKumar, B.
10.15-10.27	Petrogenesis of olivine websterite and orthopyroxenite dykes in the Sorkhband ultramafic complex, Southern Kerman, Iran: constraints on mineral and whole rock chemistry	<b>Alireza Najafzadeh</b> , M. Arvin, Y. Pan and H. Ahmadipour
10.27-10.40	Tectono -Magmatic Milieu of the Moyar Dyke Swarm, North Kerala, India: Inference from Geochemistry and Magnetic Fabric	Prasannakumar, V., <b>Pratheesh, P.</b> and Praveen, K. R.
10.40-10.50	Andean-type active continental margin in Central India: inferred from ~2.5Ga High-Mg Andesites and related igneous rocks along Kotri lineament	<b>Deepanker Asthana</b> , Anthony J. Crawford and Anil M.Pophare
10.50-11.00	Mineralogy and Geochemistry of Mafic Dykes from Kumaun Lesser Himalaya, India	<b>Santosh Kumar</b> and N. Surdas Singh
11.00-11.30	<b>Tea-break</b>	

## Presentations by Young Scientists for Best Oral Presentation Award from all the themes

### Chairpersons:

Mahabaleshwar, B., Prof.

Lehman, Bernd, Prof.

Sunderlund, Ulf, Dr.

Time (in hrs)	Title of paper	Author(s)
11.30-11.42	Sr-Nd isotopic and Geochemical studies on the basic dykes from northeastern part of the Southern Granulite Terrain, India; Implication to the petrogenesis and crustal evolution	<b><u>Dash, J. K.</u></b> , Bhutani, R. and Balakrishnan, S.
11.42-11.54	Geochronology and isotope geochemistry of the Scourie dykes, Scotland	<b><u>Davies, Joshua H. F. L.</u></b> , Heaman, L. M. and DuFrane, S. A.
11.54-12.06	An overview of synplutonic mafic dykes from late Archaean granite plutons in the Eastern Dharwar Craton, southern India	<b><u>Gireesh, R. V.</u></b> , Jayananda, M. Miyazaki, T. and Kano, T.
12.06-12.18	Polybaric Melting in an Upwelling Harzburgite Diapir: Evidence from Central Indian Boninite-like Rocks	<b><u>K. Naga Raju</u></b> , Subba Rao, D. V. and Balaram, V.
12.18-12.30	Paleomagnetism of mafic dykes from the Wyoming craton, USA	<b><u>Kilian, T. M.</u></b> , Mitchell, R. N., Bleeker, W., LeCheminant, A. N., Chamberlain, K. R., and Evans, D.A.D.
12.30-12.42	Anisotropy of Magnetic Susceptibility (AMS) Studies on the Intrusives and Flows of Kachchh Rift Basin and Its Implication on Deccan Volcanism	<b><u>Lakshmi Narasimhan, C.</u></b> , Arora, B. R., Satyanarayana, K. V. V., Jayankondaperumal, R. and Patil, S. K.
12.42-12.54	Supercratons at the ends of early Proterozoic Earth: Reconstruction of Slave, Superior, and Kaapvaal cratons at 2200-2000 Ma	<b><u>Mitchell, R. N.</u></b> , van Breeman, O., Buchan, K., LeCheminant, T. N., Bleeker, W. and Evans, D.A.D.
12.54-13.06	A method for automatic inversion of magnetic response of 2D structures	<b><u>Namaki, Loghman</u></b> and Hafizi, M. K.
13.06-13.18	Barcoding the North Atlantic Craton: U-Pb baddeleyite and zircon dating of Mesoarchaean-Palaeoproterozoic mafic dykes and intrusions in southern West Greenland	<b><u>Nilsson, Mimmi K.M.</u></b> , Söderlund, U., Ernst, R. E., Scherstén, A., Hamilton, M. A. and Paul, E. B.
13.18-13.30	Long-distance lateral magma transportation in Izu-Oshima Volcano, Japan: Petrological examination of the volcanic rocks from the submarine volcanic chains	<b><u>Ogitsu, Itaru</u></b> , Ishizuka, O., Kawanabe, Y., Geshi, N., TuZino, T., Taylor, R. N., Sano, K. and Yamamoto, T.

13.30-14.30	<b>Lunch-break</b>
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14.30-14.42	Mafic dyke swarms in the Kaapvaal craton, South Africa – geochronological evidence for multiple magmatic events in Archaean and Proterozoic times	<b><u>Olsson, J. R.</u></b> , Söderlund, U., Hamilton, M. A., Klausen, M. B. and Ernst, R. E.
14.42-14.54	Ultrapotassic dyke swarm of Vestfjella, western Dronning Maud Land, Antarctica	<b><u>Romu, Ilona</u></b> , Luttinen, A. and O'Brien, H.
14.54-15.06	The PGE geochemistry of the on-craton kimberlites from Eastern Dharwar Craton, Southern India: A direct window to the Nature of Mantle	<b><u>Rov, Parijat</u></b> and Balaram, V.
15.06-15.18	Dyke fabric and emplacement at a volcanic rifted margin – structural and anisotropy of magnetic susceptibility (AMS) studies in the Henties Bay – Outjo Dyke Swarm, NW Namibia	<b><u>Wiegand, Miriam</u></b> , Trumbull, R. and Greiling, R. O.

**Chairpersons:**  
Halls, Henry, Prof.

<b>One Slide Session</b>	
15.20-15.25	By Sebastian Tappe
15.25-15.30	By B. C. Prabhakar
15.30-15.35	By James Head
15.35-15.40	By K. R. Randive
15.40-15.45	By Elisa Piispa

15.45-16.00	<b>Time for Group Photograph of the IDC-6 participants</b>
16.00-16.30	<b>Tea-break followed by Three parallel Poster sessions</b>

### Poster Session I

**Chairpersons:**  
Heaman, Larry, Prof.  
Sawkar. R. H., Mr.  
Wingate, Michael, Dr.

### Posters from Young Scientists for Best Poster Award from all the themes

Poster #	Time (in hrs)	Title of paper	Author(s)
6-I-1	16.30-16.35	Petrology and geochemistry of metamorphosed basic intrusives from Chilka Lake granulites, Eastern Ghats Belt, India: implications for Rodinia breakup	<b>Chakraborty, Supriya</b> , Das, K. and Bose, S.
6-I-2	16.35-16.40	Geochemistry and Geochronology of basaltic dykes in Mesoproterozoic Singhora Group, Chattisgarh Supergroup, India	<b>Das, Priyabrata</b> , Das, K, Balakrishnan, S. and Chakraborty, P. P.
6-I-3	16.40-16.45	Geochronological and Paleomagnetic studies on the basic dykes from northeastern part of the Southern Granulite Terrain, India; significance to early Proterozoic continental reconstruction	<b>Dash, J. K.</b> , Pradhan, S. K., Chandrasekaran, G. Bhutani, R. and Balakrishnan, S.
6-I-4	16.45-16.50	Petrology of NK-2 and KK-6 Kimberlites, Narayanpet Kimberlite Field, Eastern Dharwar Craton, Southern India	<b>Dongre, A. N.</b> and Chalapathi Rao, N. V.
6-I-5	16.50-16.55	Map of distinct early Precambrian mafic dyke swarms from the Central Indian Bastar Craton and their possible relation with paleosupercontinent and large igneous province	Srivastava, R. K. and <b>Gautam, G. C.</b>
6-I-6	16.55-17.00	Interaction of dyke and preexisting fracture suggested by laboratory experiments	<b>Kivosugi, K, Takada</b> , A., Tanaka, K., Miyata, Y., Connor, C. B. and Roman, D. C.
6-I-7	17.00-17.05	Dyke Swarms and Related Units of Democratic Republic of Congo	<b>Muniswamy, Manimala</b>
6-I-8	17.05-17.10	1930 Ma Xuwujia norite dyke swarm and its contribution to the ultra-high temperature metamorphism and crustal anatexis in the North China craton	<b>Peng, Peng</b> , Guo, J., Zhai, M. and Bleeker, W.
6-I-9	17.10-17.15	Paleomagnetic results and cross-cutting relationships of Paleoproterozoic Dyke Swarms in the Dharwar Craton,	<b>Piispa, Elisa, J.</b> , Smirnov, A. V., Lingadevaru, M. S., Anantha

		India: tectonic implications	Murthy, K. S., Devaraju, T. C. and Pesonen, L. J.
6-I-11	17.20-17.25	SHRIMP geochronology for the 1450 Ma Lakhna dyke swarm: its implication for the presence of Eoarchean crust in the Bastar Craton and 1450-517 Ma depositional age for Purana basin (Khariar), Eastern Indian Peninsula	<b><u>Ratre, Kamleshwar</u></b> , Waele, B. D., Biswal, T. K. and Sinha, S.
6-I-12	17.25-17.30	Mineralogical attributes in rheological inversion of deformed Amphibolite dykes from a poly-metamorphosed suit of rocks near Deoghar-Josidih area, Chotanagpur Granite Gneiss Complex, India	<b><u>Rav, Savan</u></b> , Sanyal, S. and Sengupta, P.
6-I-13	17.30-17.35	Geochemistry and mineral chemistry of Amphibolite intrusives from the Lesser Himalayan Crystallines of Western Arunachal Himalaya, NE India	<b><u>Bikramaditya Singh, R. K.</u></b> and Krishnakanta Singh, A.
6-I-14	17.35-17.40	Magnetic fabrics across a thick Mesozoic doleritic dyke of the south Paraná LIP, Cuaró, Uruguay: evidences for its emplacement mechanism	<b><u>Bonnevalle, Laure</u></b> , Aifa, T., Hallot, E. and Masquelin, H.
6-I-15	17.40-17.45	Study of Dykes in Aligudarz Granitoid	<b><u>Darvishi, Esmail</u></b>

## Poster Session II

### Chairpersons:

Gladkochub, Dmirty, Dr.

Olievera, Elson, Prof.

Shrivastava, J. P., Prof.

### Theme: Petrology, Geochemistry and Petrogenesis of dykes

Poster #	Time (in hrs)	Title of paper	Author(s)
6-II-1	16.30-16.35	Geochemical characterization of mafic dykes of Central Indian Tectonic Zone (CITZ): Implications for Precambrian crustal evolution	<b><u>Alam, M.</u></b> , Naushad, Md., Wanjari, N. and Ahmad, T.
6-II-3	16.35-16.40	A study of rare differentiated mafic dyke occurrences in Karnataka and Goa, South India	<b><u>Devaraju, T. C.</u></b> , Anantha Murthy, K. S., Lingadevaru, M. and Kaukonen, R. J.
6-II-4	16.40-16.45	Revealing long-distance lateral magma transport within oceanic island arc crust	<b><u>Ishizuka, Osamu</u></b> , Kawanabe, Y., Geshi, N., Ogitsu, I., Tuzino, T., Nakano, S., Arai, K., Taylor, R. N., Sano, K. and Yamamoto, T.
6-II-5	16.45-16.50	Mafic and alkaline dykes of Swangkre, Shillong Plateau, North East India	<b><u>Mallikharjuna Rao, J.</u></b>
6-II-6	16.50-16.55	Diopsidites and rodingites, two different results of Ca metasomatism in the Oman ophiolite mantle	<b><u>Python, Marie</u></b> , Shibata, T., Yoshikawa, M. and Arai, S.
6-II-7	16.55-17.00	Doleritic sill in the Singhora Protobasin of Chhattisgarh Basin, Central India: Petrography, Geochemistry, Age Relationship and their Implications	<b><u>Sinha, D. K.</u></b> , Jain, S. K. and Prakash, K.
6-II-8	17.00-17.05	Geology, geochemistry and mantle source characteristics of the Proterozoic Ultramafic-Mafic-Basaltic dyke swarms in and around Chhattisgarh Basin, Northern Bastar Craton, Central India	<b><u>Subba Rao, D. V.</u></b> , Sridhar, D. N., Naga Raju, K., Mukherjee, A. and Balaram, V.

6-II-9	17.05-17.10	Geochemistry and Petrogenesis of the Basic Dykes from the southern margin of the Cuddapah Basin, South India	<b>Goutham, M. R.</b> , Subbarao, K. V., Prasad, C. V. R. K., Walsh, J. N. and Damodara Reddy, V.
6-II-10	17.10-17.15	Geological, Petrological and Geochemical Characteristics of the Mafic Dyke Swarms from Tirupati Cluster in the Vicinity of Proterozoic Cuddapah Basin, Southern India	<b>Hanumanthu, R. C.</b> , Subba Rao, D. V., Mallikarjuna Rao, J., Varaprasada Reddy, K. R., Anjaiah, K. V., Sivanadha Reddy G. and Shankar, D. B.
6-II-11	17.15-17.20	Geochemical and petrological characteristics of dykes from Schirmacher oasis (East Antarctica)	Sushchevskaya N. M. and <b>Belvatsky B. V.</b>
6-I-12	17.20-17.25	Petrology and geochemistry of mafic dykes from eastern part of the Narmada-Son and Tapti lineaments	<b>Raju Kumar</b> and Shrivastava, J. P.
6-II-13	17.25-17.30	Back-Arc Basin Signatures represented by Sheeted Dyke from the Muslim Bagh Ophiolite Complex, Balochistan, Pakistan	<b>Siddiqui, Rehanul Haq</b> , Mengal, J. M. and Hoshino, K.
6-II-14	17.30-17.35	Geochemistry of mafic dykes from volcanic rifted margins in the Tertiary North Atlantic and the Jurassic Karoo Large Igneous Provinces	<b>Klausen, M. B.</b>
6-II-15	17.35-17.40	Petrological discrimination among Precambrian dyke swarms on the eastern Kaapvaal craton (South Africa), correlations and petrogenetic implications	<b>Klausen, M. B.</b> , Söderlund, U., Olsson, J. R. and Ernst, R. E. Ernst
6-II-16	17.40-17.45	Petrogenetic comparison of the mafic dykes in the Kohistan paleo-island arc-back-arc system, Himalayas of North Pakistan	<b>Khan, Tahseenullah</b> , Murata, M., Zafar, M. and Ur Rehman, H.

### Poster Session III

#### Chairpersons:

Krishnamurthy, P., Dr.

Patil, M. L., Dr.

#### Themes:

**I. Petrology, Geochemistry and Petrogenesis of dykes – Contd.**

**II. Alkaline dykes**

Poster #	Time (in hrs)	Title of paper	Author(s)
6-III-1	16.30-16.35	Geology, Geochemistry and Geochronology of Dolerite Dykes in Sankra Pluton of Jalore Granites, Malani Igneous Suite, NW Rajasthan, India	<b>Baipai, R. K.</b> , Narayan, P. K., Purohit, M. K. and Trivedy, R. K.
6-III-2	16.35-16.40	Petrogenesis of basaltic and doleritic dykes from Kawant, Chhotaudepur province, Deccan Traps	<b>Hari, K. R.</b> and Swarnkar, Vikash
6-III-3	16.40-16.45	Geochemistry and AMS characteristics of Neoproterozoic mafic dykes in NW India	<b>Pandit, Manoj K.</b> , Schöbel, S, Just, J. and de Wall, H.
6-III-4	16.45-16.50	Petrogenesis of the end-Cretaceous diamondiferous Behradih kimberlite, Central India: implication for the plume-lithosphere interactions in the Bastar craton?	<b>Chalapathi Rao, N. V.</b> , Lehmann, B., Mainkar, D. and Belyatsky, B.
6-III-5	16.50-16.55	The preliminary geology and evaluation of the Koidu kimberlite dykes, Sierra Leone	<b>Hetman, Casey M.</b> , Nowicki, T., Freeman, L. and Abedu, B.
6-III-6	16.55-17.00	High-silica lamproite dykes from Schirmacher Oasis, Queen Maud Land, East Antarctica	<b>Jafri, S. S. H.</b> , Moeen, S., Dayal, A. M. and Narayana, B. L.

6-III-7	17.00-17.05	K-Ba-Fe-Ti-oxide minerals in lamproites from the Jharia Coalfield	<b><u>Mitchell, Roger H.</u></b> and Kent, R. W.
6-III-8	17.05-17.10	Early Cretaceous alkaline-carbonatite intrusions within the Shillong plateau, Eastern India	Srivastava, R. K. and <b><u>Sinha, Anup K.</u></b>
6-III-9	17.10-17.15	Evolution of Carbonatite dykes in Amba Dongar carbonatite-alkalic ring complex, Gujarat, India	<b><u>Viladkar, S. G.</u></b>
6-III-10	17.15-17.20	Petrochemistry of basic dyke rocks juxtaposed with rare metal granite-pegmatites hosting columbite-tantalite and beryl mineralisation from Pandikimal and Jangapara areas, Jharsuguda district, Orissa	<b><u>Pandey, K. K.</u></b> , Mishra, K. S., Jagadeesan, P. and Roy, M. K.
6-III-11	17.20-17.25	Geochemistry and petrogenesis of mafic dyke swarms intruded into Archeans adjacent to Cuddapah basin	<b><u>Subba Reddy, N.</u></b> , Raghu Babu, K. and Gowtham, M.
6-III-12	17.25-17.30	Geology of Chagapuram Pyroclastic Kimberlites near Kurnool basin, Southern India	<b><u>Ravi, S.</u></b> , Patel, S. C., Bhaskara Rao, K. S. and Vaideswaran, T.