## Newsletter - July 1999 OSA'99@Toronto Edition (Volume - 2)

## **OITS** Orissa Information Technology Society

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#### **Orissa Information Technology Society (OITS)**

#### **Membership Form**

1. Name				
2. Sex M/F				
3. Date of Birth:	day	month	year	
4. Qualifications:				
5. Address: 0	Contact Address		Permanent address (	(in Orissa)
6. Telephone:		email:		
7. Area of interes	t			
8. Professional experience				
9. Type of member	ership (Please mark)	)		
(i) Annual membersRs.100/- (ii) Life membersRs.1500/- (\$50/- for NROs) (iii) Institutional membersRs.2500/ (iv) Student membersRs.50/- (v) Donor membersRs.5000/- (\$125/- for NROs) (Recommended for US and Canadian Residents) (vi) PatronsRs.25000/-				
10. Particulars of payment: Cheque/Draft/Cash (Cheque or Draft payable to OITS)				
11. Remarks (Please attach a sheet if you would like to give additional information/suggestion.)				
Signature Date				
For office use				
Membership	No.	receipt no.		
Remarks, if a	ny 			

Cheque or draft in favour of 'oits' may be sent to Dr. P K Behera, Treasurer, OITS, Dept of Computer Science and Applications, Utkal University, Bhubaneswar 751004; or, Prof S P Misra, President, OITS, 147 Kanan Vihar HIG Colony, Bhubaneswar 751031. In North America please send your membership applications to Dr. Rabi Mahapatra, Department of Computer Science, Texas A&M University, College Station, TX 77843-3112.

#### Orissa Information Technology Society (OITS): An Introduction

Prof. S.P. Misra

#### 1. OITS, Formation and Structure:

A Conference on Information Technology was held at Utkal University, Vani Vihar from December 21st to December 23rd, 1997 with a very short notice. Considering that this Conference was arranged with roughly a month available for organising the same, it was a reasonable success, and, generated lots of interest in IT in Orissa, with the participation of a large number of students of the same.

On 22nd December, 1997, quite a few of the participants got together and took two important decisions. (i) It was decided that we may form a Society called 'Orissa Information Technology Society' (OITS) to facilitate growth of IT activity in Orissa. (ii) It was also desired that we may have a Conference on IT again from 21st December to 23rd December, 1998, with adequate preparation.

Subsequently OITS has been formed to promote various activities in IT as in Memorandum and Articles of Association of Orissa Information Technology Society with a very wide mandate. The original decisions were taken with quite a few participants of CIT-97 including L.M. Patnaik, A.K. Pujari, G.S. Mishra, Chitta Baral, Rabi Mohapatra, Purna Mohanty, Hrushikesh Mohanty and many others. Application for registration of the same under Societies Registration act was made in March, 1998, and registration certificate has been obtained in May 1998, (with jurisdiction over the State of Orissa).

As mentioned, the bylaws contain a lot of semi-legal statements, and I shall condense some of them here with a few remarks.

- (a) Aims and objectives: A very wide spectrum of activities in IT including fund raising as well as holding national or international seminars.
- (b) Membership: (i) Annual Member...Rs100/-; (ii) Life Member...Rs1500/-(\$50/- for NROs); (iii) Institutional Member...Rs.2500/-; (iv) Student Member...Rs.50/-; Donor Member...Rs.5,000/-(\$125 for NROs); Patron...Rs.25,000/-.

Remarks: The Society has its jurisdiction in Orissa and thus the members are expected to give a permanent address there during registration.

(c) Present Office bearers: (i) President (S.P. Misra, Bhubaneswar); (ii) Vice-President (L.M. Patnaik, Bangalore); (iii) Secretary Overseas (Chitta Baral, Houston); (iv) Teasurer (P.K. Behera, Bhubaneswar); (v) Joint Secretary (P.K. Mishra, Bhubaneswar).

In the last general body meeting in December, 1998 it was decided that since Prof. P.K. Meher did not wish to continue as Secretary, the Joint Secretary shall function as the Secretary.

In addition to the office bearers, the present executive committee members also include A.K. Pujari (OCAC), G.S. Mishra (OSEDC), Manas Patnaik (STPI), J.R. Sahu (RRL), M. Nayak (CET), K.N. Bhagat (IISIT), A.K. Rath (OEC) and B.C. Rath (OCA). The above members head many important Government and semi-government agencies or, private institutions dealing with formal education in information technology.

Remarks: Secretary Overseas will take care of interacting with the members abroad, including those of a financial nature. He may probably collect the funds (if in dollars) and then along with the forms, send the same to Treasurer, OITS, Department of Computer Science and Applications, Utkal University, Bhubaneswar 751004, or to the Secretary, or to the President.

(d) Elections: The General Body consisting of all members (excluding student members) shall elect the office bearers from amongst themselves and seven members of the executive committee members.

Remarks: This general body meeting was after CIT'98 this year. Those members who shall be absent may if they so desire email an opinion, which shall be taken into account in the meeting.

(e) Miscellaneous: There are a few more rules regarding notice for meetings, quorum (1/3rd), audit, etc.

#### 3. OITS, Membership and Finances:

OITS members include people like Prof S.N. Behera, Director, Institute of Physics (where probably we have the best computer setup with email usage for about eight years), Prof S. Torasia, Director, Inst of Material Sc., Shri S. Mudali, Director, NIST (Berhampore), Sri Laxman Mohanty, Director, SSIT, D.C. Nayak, Saroj Behera, Purna Mohanty, L.N. Bhuyan, and, Jaydev Misra and some others of USA and India, besides the executive committee members mentioned above.

Let us now note a few particulars of members of the Society and its financial status as in the end of June, 1999. OITS has now a total of ninety-five members, with a break-up of one patron, twelve donor members, seventy-seven life members and four annual members. The following is the list of donor member and patrons with their membership numbers: S.P. Misra (P98/1), C. Baral (D98/13), D.C. Nayak (D98/23), Saroj Behera (D98/24), Suchitra Patnaik (D98/25), Prasant Mohapatra (D98/70), L.N. Bhuyan (D98/71), R.N. Mohapatra (D98/72), Sagar Naik (D99/79), Durga Misra (D99/90), Aditya Mishra (D99/91), Aparajita Mishra (D99/94) and Pitambar Sarangi (D99/95). The contributions from patron(1) and donor members(12) is Rs.88,785/-; from life members(77) is Rs.38,471/-; from institutional member(1) Rs.1,500/-; and annual members(4) is Rs.300/- (the annual members cease to be members now unless they pay the dues). A full membership list appears separately.

As noted earlier, the membership amounts are the same from inside India as well from outside. It is generally understood that the members from outside India may rather become donor members (US\$120/-). In fact, such payments mainly enable us to take up some serious activities needing some funds as mentioned later.

Further, while looking for memberships in different categories, it has been decided that all the money of life members should ultimately go towards fixed deposits; regarding uncommitted contributions from donor members or patrons, half of it may be spent in our activities and half would go towards fixed deposits; and for the above category with a contribution for a specific purpose, except for life membership amount, the money may be spent for the purpose for which it is donated to the extent practicable. We would appreciate if donor members/patrons specify any programme they may have in mind (like introducing email in a specific college or help a specific institution in a given manner), and we shall do our best to spend it that way or get back to them if we face problems.

With the above in view, we have deposited a sum of Rs.75,000/- (three fixed deposits) and are looking after expenses for other activities from the balance of the money. A financial statements of the accounts of 1998-99 ending in March is presented elsewhere, separate from CIT'98.

The accounts of CIT'98 have been finalised by Dr. P.K. Mishra, Finance Chair for CIT'98. Here the total receipt was about Rs. 5 Lakhs, and, after almost all the expenditures, there is a balance of about Rs.98,000/-. The Committee for CIT'98 and the executive committee of OITS ratified the earlier decision that of the above, Rs.25,000/- shall be paid as a part of the seed money for CITEXPO-99 (with another Rs.25,000/- being paid by Information Technology Association of Orissa (ITAO)). It was also decided that the balance of the money may be made available for local/national conferences or similar activities in Orissa, particularly for travel and/or stay of young students/faculty. In this manner, the money mostly paid by local Institutions can be utilised for their betterment.

#### 4. OITS, Activities and Plans:

In 1998 almost all the activities of OITS centered around making of CIT'98 a success. It was decided that OITS should go ahead and organise the same along with Utkal University. I am glad to mention that for this purpose I had full cooperation of the previous Vice-Chancellor, Prof G.K. Das, as well as the present Vice-Chancellor, Prof G. Das, who contributed the best they could do for the Conference. Thanks to the active co-operation of all the Chairs of CIT'98, the International Conference on Information Technology became a grand success.

Once CIT'98 was over, we have settled down to many other activities, an important one being CITEXPO-99 on the anvil. Since it is quite an extended activity, we shall discuss about this in a separate note.

Through Purna Mohanty and Chitta Baral we have received about 100 books for use by computer students and professionals. These are now kept at Kalinga Institute of Industrial Technology (KIIT), who have assured us that later they will make one room available as the reading room cum office for OITS. We have an intimation that we may some time soon get another 400 books. Such a generosity on the part of our friends and colleagues will be quite helpful for institutions here. We are purchasing furnitures for this purpose as the books arrive.

It is decided that we may have to start with adopt one school for computer education. This activity shall be coordinated by Sri Laxman Mohanty of Silicon School (ORICOM), who has already handled projects of this type. With our subsequent experience and availability of funds with donors for specific schools, we shall subsequently extend this activity. We have at

present earmarked a very modest sum of Rs.5000/- for this purpose, since it appears that donor may be available for the computer.

I have a very strong opinion (shared by many others) that all the degree Colleges should have e-mail and internet facility. From July when the Colleges open, we have plans of visiting different Colleges and helping them to have this facility. With this in mind (and otherwise) we have already applied for an internet connection from the dept of telecommunications (cost for 500 hrs: about Rs.10,000/-). This link will help us to demonstrate the usage of internet in different academic institutions. We shall go ahead with the same, including inviting school/college students to come for free demonstrations on holidays. By the way, DoT has optical fibre links now to all the old district head quarters, so that we expect the connections to be reliable. At present, these links are about a factor of ten faster than the STPI connections (which needs, and shall be upgraded soon).

There was a proposal that OITS shall have a wide area network. Partly in connection with the same, we might obtain a lease line from DoT, cost Rs.40,000/- for a 64 Kpbs - half of what Institute of Physics has at present, and then create local data bases - technical and non-technical, with us and/or Inst of Physics, Inst. of Mathematics, Inst of Life Sciences, Inst of Material Science etc. This could take a concrete shape in the next six months.

There was a very strong appeal by National Institute of Science and Technology (NIST, Berhampore) that CIT'99 could be at their site, where reasonable facilities were available. They also mentioned that they would like to have the same with technical support from REC Rourkela. However, it was clear from logistic reasons that the International Conference with EXPO-99, an IT exhibition on a grand scale as was done as EXPO-98, can only be at Bhubaneswar. We plan to have local/national workshops/conferences at such places, for which some seed money from CIT'98 can be available, besides the support that individual institutions may garner. These conferences should have good coverage from inside Orissa, and should be as important an activity for OITS as the international Conference. The two activities appear to me as being complementary.

In the above context there was also a proposal that we may have local chapters of OITS. We may start with the same with probably a Berhampore Chapter and a Rourkela or Sambalpur Chapter. This will make the professionals of OITS more independent, and if some Chapters have active members who would like to spread IT usage, they may be more free to act. In fact, the Berhampore and Rourkela Chapters may have their own President, Secretary, Treasurer and/or any other office bearer to carry out their own activities, and keep the other members/Chapters/main organisation informed about what they do. I shall welcome suggestions regarding this.

I have also an idea of involving IT students/young faculty for some of the activities as above, again on a voluntary basis, and I have talked about it with some Institutions with a positive response.

We also invite IT professionals from abroad who visit us to give lectures as a part of our programme. Their experience and expertise will not only enlighten local students, but will also become a source of inspiration to them.

We could also persuade industries to advise regarding course structures for marketability of IT students, and persuade them to make campus selections when they may not be already doing the same.

The above statements roughly reflect our present activities and plans, which in my opinion should be a dynamic one depending on available resources in money and voluntary man power. Half a dozen people seriously interested can get a few things done. My feeling is at least that many people are always available.

#### 5. Some observations:

We strongly feel that IT development in Orissa can be fast; for this purpose we should do what we can individually, and get together for a few things when we feel it calls for joint action. It is requested that the IT experts (and those having a keen interest in its development) in Orissa may join us as members of OITS, and make their advice and expertise available to a more general public. They may in particular help some institutions to update their information base in IT as they think appropriate, may take some classes to overview specific technical topics or give seminars, or wish us to help specific institutions in a specific manner as donor members or patrons. We shall also always welcome their moral support/suggestions/financial or technical assistance regarding our activities, through which we all together contribute some thing towards putting Orissa in the IT map of India or elsewhere. It will be a difficult job, but is worth trying.

#### S.P. Misra

President, OITS 147, Kanan Vihar HIG Colony, Bhubaneswar-751031, tel:91-674-440810, email:spmisra@dte.vsnl.net.in



#### Report on CIT'98

Dr. Rabi Mohapatra

The CIT98 was mainly organized by OITS (Orissa Information Technology Society. The Utkal University also participated in co-organizing it.

- 1. The CIT98 was attended by 231 registered participants and more than 50 honorary/students participants. There were more than 40 participants from abroad (10 countries). Out of 40 say 25 were from Indian origin.
- 2. There were eight tutorials organized at four to five venues in Bhubaneswar and attended by more than 200 participants. Most of the participants were local. The faculty were given free registration to these tutorials.
- 3. There were 40 papers presented in two days (two parallel sessions on many slots) by speakers whose papers were reviewed and accepted. The acceptance rate of full papers were 38%.
- 4. Total seven invited talks were delivered by experts from abroad and India in addition to three key note addresses. The Keynote speakers were: Prof. Jayadev Misra, UT Austin; Mr. Jnan R. Dash, Oracle Corp., USA; and Mr. H. Chowdary, IT advisor to AP Govt.
- 5. The conference Proceedings was published by Tata McGraw Hill Pub, New Delhi with a nice cover designed by original artist Mr. Pravin Badhia from San Jose. The proceeding came out as a book with title "Trends in Information Technology".
- 6. There were two interesting Panel discussions on education and industries organised on 22nd and 23rd after-noons. Persons from Govt., academics, industries and media participated.
- 7. The conf was inaugurated by industry minister of orissa in which the DoE Secretary, New Delhi was the chief guest. Prof. Jayadev Misra and Mr. Jnan R Dash were felicitated for their contributions in the field of information technology. On 21st December evening, Chief Minister gave a state dinner to the participants that was attended by 150 delegates and guests at state guest house. Most secretaries of Govt. of Orissa related to industries and IT attended it including chief secretary. Addl. Chief secretary

was the guest during valedictory function.

- 8. All India Online had co-sponsored the conf and was present at the hotel lobby to demonstrate internet access and provided e-mail communications for participants. It was nice experience to many local students who surfed the internet first time.
- 9. From India, participations were seen from 4 IITs, IISC Bangalore, Jadavpur Univ, many national R&D organizations, defense organizations, neighboring universities, multinational companies from metros and some financial institutions. Faculty and students of most academic institutions of Orissa were attending the conference. Persons from Infosys and Satyam participated too.
- 10. We were able to offer a good number of conference fellowships to students from Orissa and Indian institutions due the donations from following persons in North America. Somdutt Behura, Triswampit Mitra, Lalu Mansingha, Manoj Sahu, Asutosh Dutta, Pradeep Lenka, Brajendra Panda and Suchitra Patnaik.
- 11. Though we started with zero money, we were able to get a modest amount of five lakhs from sponsorship and advertisements in the souvenir. (souvenir is another publication besides the proceedings) co-sponsorers were: Oracle India, Kalinga Institute of Industrial Technology, Indian Institute of Sience and Industrial Technology (Mr. Bhagat), All India On Line, C-DAC Pune, OEC, Orissa Computer Academy, BBSR, ITAO, SIDB Bhubaneswar, Silcon Inst of Info. tech, Bhubaneswar, Oricom, IBM Training School, BBSR, IEDSO-USA, RCM BBSR and NIST Berhampur. We are thankful to them for the support. I am sure we have at least 1 lakh saving from CIT98 that should go as seed money to start CIT99.
- 12. The participants and guests were provided with lunches at Hotel venue near the swimming pool all the three days. The banquet was organized at khandagiri with bonfire and barbeque in open air cave. The banquet was preceded by an Oddisi program performed by Cuttack troupe which was sponsored by IISIT, BBSR.

Rabi Mahapatra

Program Chair, CIT'98

Department of Computer Science, Texas A&M University, College Station, TX 77843-3112, Email: rabi@cs.tamu.edu

#### CITEXPO-99

#### International Conference on IT (CIT'99) and, IT EXPO-99, Dec 20-22, 1999

Organised by Orissa Information Technology Society (OITS) and Information Technology Association of Orissa (ITAO).

An International Conference on Information Technology (CIT'98), a gathering of information technology (IT) related academicians, was held on 21-23, December, 1998. It was a grand success, and the Proceedings of the same have been published by Tata Mc. Graw Hill. The Conference e.g. was attended by more than thirty academicians from abroad, who actively participated in the same. After the Conference, in the general body meeting of Orissa Information Technology Society (OITS), there was a discussion regarding holding of CIT'99 as a continuation of the same. The general body of OITS was also attended by some representatives of Information Technology Association of Orissa (ITAO), who had conducted another industry related IT activity, EXPO-98 with equal if not greater success. They had also envisaged a continuation as EXPO-99.

In this meeting there was a general agreement that the activities may be co-ordinated, and for this purpose, a steering committee was formed. They consisted of two members of OITS, two members of ITAO, two members from semi-Government organisations, two non-resident Oriyas from USA who were taking an active interest in IT activities in Orissa, and a scientist of international repute in the field of IT, respectively, as below:

S.P. Misra (Convener and Chairman) Hrushikesh Mohanty Sanjeeb Nayak Shakti Tripathy G.S. Mishra Manas Patnaik R.N. Mohapatra Purna Mohanty L.N. Bhuyan

The Steering Committee next co-opted two other well-known computer scientists involved in IT activities in Orissa, i.e. (i) L.M. Patnaik, IISc, Bangalore and, (ii) A.K. Pujari, CEO, OCAC.

This Committee met several times, and, after discussing with the persons concerned, has suggested the following Chairs for CITEXPO-99:

#### **General Chairs:**

- 1. L.N. Bhuyan, University of Texas, A & M
- 2. G.S. Mishra, MD, OSEDC

#### **Organising Chairs:**

- 1. Sanghamitra Mohanty, Utkal University
- 2. Manas Patnaik, Director, STPI

#### **Programme Chairs:**

- 1. Chitta Baral, Texas University, El Paso
- 2. Hrushikesh Mohanty, Hyderabad University

#### **Exhibition Chairs:**

- 1. P.C. Sahu, GM, DoT, BBSR
- 2. Somdutt Behura, Airliquide, USA

#### **Workshop Chairs:**

- 1. Rakesh Agarwal, Infosys
- 2. Bijoy Mishra, DoT, RKL

#### **Finance Chair:**

1. J.K. Sahu, RRL

#### Vice- General Chair:

1. R.N. Mohapatra, University of Texas, A & M

#### Vice- Organising Chairs:

- 1. P.K. Mishra, KIIT, BBSR
- 2. Laxman Mohanty, ORICOM
- 3. P.R. Patnaik, OCIS, BBSR

#### **Vice- Exhibition Chair:**

1. Shakti Tripathy, ODC, BBSR

#### **Tutorial Chairs:**

- $1.\ Ratan\ Ghosh, IIT, Kanpur$
- 2. D. Misra, NJIT, USA

#### Vice- Finance Chair:

1. G.B. Gupta, Sun-Micro, BBSR

#### **Publicity Chairs:**

- 1. Purna Mohanty, Apple Comp, USA
- 2. Sanjeeb Nayak, ORICOM

#### Convenor:

1. S. Torasia, IMS, BBSR

The call for papers for the International Conference on Information Technology (CIT99), Bhubaneswar, India between December 20-22, 1999 originally appeared in web pages in the address as http://www.oits.org/icit99 through the Programme Chairs some time back, and the printed updated version of the same is being attached herewith. The themes covered here include but are not limited to:

- \* Soft Computing
- \* Strategic Impact of Information Technology
- \* Networking and Ubiquitous Computing
- \* E-commerce and data mining
- \* Design and Architecture of IT Chips
- \* AI, robotics and computer vision
- \* Software engineering
- \* Parallel and Distributed Computing
- \* Multi-Agent Systems
- \* Object Oriented Programming
- \* Graphics and Human-Computer Interactions

There will be several special sessions in some focussed areas. A workshop on Internet has also been proposed.

CIT'98 organised tutorials on different areas like mobile data and transaction management, electronic data security, designing applications with objects, Internet protocol (version 6), web warehouse design, etc. Keeping the importance of such tutorials in view, CIT'99 has also invited proposals from researchers and practitioners to hold tutorials at different levels (beginners, advanced, etc.) in emerging areas of IT.

The EXPO-99, to bring the IT related industrial products together, is being organised along with CIT'99 as a part of CITEXPO-99. Interested industries are being invited to participate in CITEXPO-99 and contact the Exhibition Chairs for further details for participation in the exhibition, or, for product presentations/seminars/popular lectures. The special brochure for this shall appear in due course.

#### S.P. Misra

Chairman, Steering Committee

#### MESSAGE FROM THE GENERAL CO-CHAIR, CIT'99

#### Dr. (Prof.) Laxmi Narayan Bhuyan

The Orissa Information Technology Society (OITS) is organizing the Second International Conference on Information Technology (CIT'99) in Bhubaneshwar during 20-22 December'99. As evident from last year's success, this conference will bring together international leaders from academic, research, and industry organizations for quality research presentations and a healthy professional interaction. The primary goal of holding such a conference in Bhubaneshwar is to promote the growth of academic, industrial, research and development activities in the IT sector in Orissa. It is hoped that young IT professionals of Orissa, particularly the students and the future IT leaders of Orissa, will immensely benefit through such an interaction.

It is an honor and privilege for me to serve CIT'99 as Co-General Chair. The Executive Committee of the OITS has put together a group of dedicated members to organize this exciting Conference. More details on the OITS and CIT'99 can be obtained at our web site: http://www.oits.org. I would like to see a bigger participation this year by the people from IT industries. You may participate by presenting papers and tutorials, related to your work, or by attending several interesting sessions. Please see our web page for details on how to submit papers or tutorial proposals.

I request the Oriya community in general and the OSA'99 convention attendees in particular, to give wide publicity to this event, participate and contribute to the growth of this significant activity in Orissa. I invite you all to attend CIT'99, meet IT colleagues, enjoy good oriya food, and have a wonderful time. The conference is quickly becoming a home coming convention for the non-resident Oriyas. I look forward to welcoming you at Bhubaneshwar in December, 1999.

I wish you all an exciting time at the OSA'99 Convention in Toronto.

Sincerely

Dr. (Prof.) Laxmi Narayan Bhuyan, General Co-Chair, CIT'99, E-mail: bhuyan@cs.tamu.edu

#### **CALL FOR PAPERS**

### Conference on Information Technology (CIT'99) & ITEXPO-99 Bhubaneswar, India, December 20-22, 1999.

(http://www.oits.org/icit99)

Organised by Orissa Information Technology Society (OITS) and Information Technology Association of Orissa (ITAO)

Theme:

The Conference on Information Technology (CIT) provides a high quality forum for scientists and engineers to present their latest research findings in this rapidly changing field. The first conference CIT'98 was held in Bhubaneswar, December 21-23, 1998 with active participation of academia as well IT industries. The details of this conference may be found in www.oits.org/~cit98. For CIT'99 authors are invited to submit their original and unpublished work on all aspects of Information Technology. Topics of interest include but are not limited to:

- \* Soft Computing
- \* Strategic Impact of Information Technology
- \* Networking and Ubiquitous Computing
- \* E-commerce and data mining
- \* Design and Architecture of IT Chips
- \* AI, robotics and computer vision
- \* Software engineering
- \* Parallel and Distributed Computing
- \* Multi-Agent Systems
- \* Object Oriented Programming
- \* Graphics and Human-Computer Interactions

There will be several special sessions in some focussed areas. Interested organizers are requested to submit a 1-2 page proposal to the program chairs as soon as possible.

#### **Paper Submissions**

Authors are requested to submit four (4) copies of the full manuscript (including abstract, keywords, email address) and to either of the following program chairs. The size of the submissions are limited to 6000 words and people with access to the Internet must submit it as 6 pages in one of the formats in the site www.aaai.org/Publications/Templates/macros-link.html.

#### **Program Co-Chairs:**

Chitta Baral
Department of Computer Science
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El Paso, TX 79968, USA.
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Authors are recommended to submit papers electronically, but hard copy submission is acceptable.

Submission Deadline: July 20, 1999. Author Notification: September 9, 1999. Camera-ready copies: October 9, 1999.

Conference proceedings will be published and available before the conference. For more information about the conference please write to one of the program chairs.

#### **Tutorials**

CIT '98 organized tutorials on different areas like mobile data and transaction management, electronic data security, designing applications with objects, Internet protocol (version 6), web warehouse design, etc. Keeping the importance of such tutorials in view, CIT'99 invites proposals from researchers and practitioners to hold tutorials at different levels (beginners, advanced, etc.) in emerging areas of IT..

#### **Tutorial proposals:**

submission deadline July 20, 1999. Acceptance notification September 9, 1999 Camera ready copy October 9, 1999.

#### **Exhibition**

The EXPO99 is being organized to showcase latest IT products and services. All IT companies are invited to participate in this. Along with exhibition, a Technology Seminar is being organised which will include talks on various emerging technologies and/or product presentation by different IT companies. Interested parties may contact the Exhibition Chairs for further details.

#### **Patron**

Ravindra Gupta, DOE Secretary Government of India

#### **General Chairs**

L. N. Bhuyan, Texas A & M University, USA bhuyan@cs.tamu.edu

Vice-General Chair

Rabi N. Mahapatra, Texas A & M University rabi@cs.tamu.edu

**Organization Chairs** 

Sanghamitra Mohanty, Utkal University, India sangham@dte.vsnl.net.in

**Vice-Organisation Chairs** 

P.K. Mishra, KIIT, Bhubaneswar pkm@stpbh.soft.net

Laxman Mohanty, Silicon School, Bhubaneswar lxn oricom@hotmail.com

**Tutorial Chairs** 

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**Exhibition Chairs** 

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**Finance Chair** 

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**Publicity Chairs** 

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#### **Program Committee (with some area chairs):**

Hamideh Afsarmanesh, University of Amsterdam, Netherlands

Hamid Arabnia, University of Georgia, USA

Jay N. Bhuyan, Tuskegee University, Alabama, USA (Genetic Algorithms)

P.K. Biswas, Indian Institute of Technology, Kharagpur

Sharat Chandran, Indian Institute of Technology, Mumbai (Graphics and Vision)

Pranay Chaudhuri, Kuwait University, Kuwait

Chitta R. Das, Penn State University, USA

Dipankar Dasgupta, University of Memphis, USA

D. Dashsharma, Hewlett Packard, USA

S.C. Mehta, DOE, Govt. of India

Chris George UNU/IIST, Macau

Gerard Huet, INRIA, France

S. Sitharama Ivengar, LSU, Battonrouge, USA

Vladik Kreinovich, University of Texas at El Paso, USA (Interval Computations & Soft Computing)

Jorge Lobo, Lucent Technology and Univ of Illinois at Chicago (Knowledge Representation)

Prasant Mahapatra, Iowa State University, USA (Parallel and distributed Computing)

D. Mitra, Jacksun State University, USA

Ashwini Nanda, IBM T. J. Watson Laboratory, NY, USA

Abhaya Nayak, Macquarie University, Australia

Hung Nguyen, New Mexico State University, USA

K. Naik Univ. of Aizu, Japan (Networking)

Srikanta Pattnaik, UCE Burla, India

Arun K. Pujari, University of Hyderabad, India (Data Warehousing and Data mining)

J. C. Patra, REC Rourkela, India

D. Saha, Jadavpur University, India

Ashok Samal, University of Nebraska, Lincoln, USA

Dheeraj Sanghi, IIT Kanpur, India

N. L. Sarada, Indian Institute of Technology, Mumbai (Software Engineering)

Uttam Sarkar, IIM Calcutta (E-commerce)

M. R. Satapathy, IIT Gwahati, India

Onn M. Shehory, Carnegie Mellon, USA (Multi-agent systems)

Cheickna Sylla, NJIT, USA (Strategic Impact of Information Technology)

Niranjan Tripathy, Fujitsu Microelectronics, USA

K. Vidyasankar, Univ. of New Foundland, Canada

#### **Advisory Committee:**

L.M. Patnaik, IISc, Bangalore

Arvind, MIT, USA

H.S. Ray, RRL, Bhubaneswar

S.N. Behera, Inst of Phys, Bhubaneswar

A.K. Pujari, OCAC, Bhubaneswar

Dharma P Agarwal, North Carolina State Un, USA

P.N. Chatterjee, IIT, Kharagpur

Sarit Kraus, Bar-llam University, Israel

G. Das, Utkal University, Bhubaneswar

Jaydev Misra, University of Texas, Austin, USA

N. Narayan Murthy, Infosys, India

B.K. Sarap, OEC, Bhubaneswar

Norcio Shratori, Tohoku University, Japan

N. Seshagiri, NIC, New Delhi

R.P. Agrwal, C-DAC, Pune

H.C. Chowdhury, Govt. of Andhra Pradesh, Hyderabad

Prasanna Misra, Govt. of Orissa, Bhubaneswar

V.S. Ramamurthy, DST, Govt. of India

Yale Patt, Michigan State University, USA

D. Dutta Maiumdar, ISI, Calcutta

P.K. Dash, REC, Rourkela

A.K. Chakravorty, DOE, Govt. of India

#### Chairman, Steering Committee

S.P. Misra, President, OITS spmisra@dte.vsnl.net.in

#### **About Bhubaneswar:**

http://www.orissaindia.com

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The state of Orissa, of which Bhubaneswar is the capital, is located in the eastern part of India between Bengal and Andhra Pradesh. There are convenient air and surface transportation to Bhubaneswar. The area offers a number of fascinating activities for visitors: many historic shrines built by Hindus, Buddhists and Jains; a range of handicrafts and handwoven textiles, and opportunities for enjoying the distinctive art forms of this region. The areas around Bhubaneswar have several major attractions. The magnificent Sun Temple of Konark (known to generations of sailors as Black Pagoda) is internationally renowned. Puri and Konark -- both within 30 miles of Bhubaneswar -- have beautiful beaches, and the Chilika Lake (about 60 miles from Bhubaneswar), the largest brackish water inland lake in Asia, abounds with migratory birds and many varieties of fish. Close to Bhubaneswar is the Chandaka Forest, a sanctuary for wild elephants, and Nandankanan Zoological Park, a botanical garden that includes the largest lion and tiger safari in India. The Udayagiri and Khandagiri hills at the outskirt of the city have a network of man-made caves dating from the fourth century B.C. Presently, Bhubaneswar offers a great promise to IT industries enthused by several liberalisation policies of local government. Some nationally renowned IT industries have started operating from the city. It is the fastest growing city in the eastern region of India.

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#### Important dates for paper submissions/tutorials

Submission deadline July 20, 1999
Acceptance notification September 9, 1999
Camera ready copies October 9, 1999

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#### **Orissa Information Technology Society (OITS)**

OITS is a Society of computer professionals for promoting computer education and usage in Orissa. It is mainly a body of educationists and researchers who wish to help regarding fast growth of IT in Orissa. It

has a very strong component of computer scientists staying outside the state and the country. It organised last year an International Conference on Information Technology (CIT'98), the Proceedings of which was published by Tata Mc. Graw Hill.

#### **Information Technology Association of Orissa (ITAO)**

ITAO has been established by hardware/software vendors, educational institutes and computer professionals in order to promote computer usage in the State. It has already established several chapters in the State including at Cuttack, Berhampore and Bhubaneswar etc. In association with Government of Orissa it organised first ever computer exhibition PC EXPO-98 on a mammoth scale.



#### Some Current OITS Initiatives: A Report from OITS Overseas Secretary

Prof. Chitta Baral http://cs.utep.edu/chitta

The two main initiatives, besides the ICIT conference, that we are currently focusing on are: setting up an IT library in Bhubaneswar and preparing the ground work for setting up of virtual research laboratories.

Most people are aware that the Bhubaneswar-Cuttack area has now several institutions that offer university approved IT related programs such as MCA, B.Engg in Computer science and B.Sc (Hons) in computer science. This is in addition to various other programs approved by Microsoft, IBM, Apple etc. One of the main thing that is lacking in these institutions is the availability of qualified faculty. One of the main motivations behind the two initiatives mentioned here is to counter this.

Although now there are a lot of IT related books available in the Indian market, most of these books are on programming languages like C++ and Java, and often they are not the best ones that are available in the US. Moreover, most of the text books used in Computer Science programs in the US are not available in India. Sometimes, one or may be two text books at the undergraduate level on certain topics are available in eastern economy edition in India, but not more, and not for graduate level. As a Computer Science faculty here in the US I have access to several (5-6 or more) different text books at different levels on a single topic.

Hence, our goal is to have an IT library in Bhubaneswar which will, in addition to having the books that are commonly available in India, have multiple books and text books at undergraduate, graduate and research level. We plan to have this library at one of the institutions in Bhubaneswar that agrees to give us free space, and agrees to our terms such as making the books available to all OITS members regardless of where they work, teach or study; having a copier machine nearby and having long hours when the books are accessible, etc.

With this idea in mind, we started a book collection campaign in August 98. We have collected more than 750 books (list available at http://www.oits.org) and have already sent about 100 books. (These books have reached Bhubaneswar and are housed in the library of KIIT, where the OITS library will most probably be located.) The cost of mailing books through US mail or similar channels being expensive, our plan is to send them through Kalinga hospital shipments, or similar shipments at an add-on price. About 500 books are with Dr. Durga Misra in NJ waiting for such an opportunity for shipping. We will try our best to have the books reach Bhubaneswar by the end of this year and inaugurate the library in Dec 1999.

To keep the library up to date we would like people to continue donating any useful IT book they can spare. We would prefer that people mail the books directly by US Mail M-bag option (which costs about \$2 a book) to Dr. S. P Mishra, President of OITS and send an email to me. If people can not send the books directly, they can send it to me, or Purna Mohanty in the San Francisco bay area, or Dr. Durga Misra in the NY/NJ area.

I would like to take the opportunity to thank Dr. Jaydev Mishra (UT Austin), Dr. Ching-Kuang Shene (Michigan Tech), and Dr. Rabi Mahapatra (TX A&M) for donating about 100 books each. In addition I would like to also mention Purna, Sukanta and other in the bay area, Himanshu and Rashmita in the Chicago area, and Manoj in Pa/NJ/NY, for having book collection drives. My thank s to all the others who chipped in this effort. The details are listed at http://www.oits.org/.

Besides the library initiative, our other initiative, which is still at a very preliminary stage, is about setting up virtual IT research centers in Orissa. Since the universities in Orissa have only recently started departments on Computer Science and Information Technology, they have very few faculty pursuing research and as a result it is difficult for students interested in pursuing a doctoral degree to find an appropriate guide. (I must mention that there are some good and active faculty, but there research interests do not adequately cover the various sub-fields in computer science and information technology.) During the CIT98 conference several students interested in pursuing a Ph.D contacted me about this issue. It must be noted that some of these people after their Ph.D intend to join the IT institutions as faculty. Thus to ensure that the quality of faculty in IT institutions in Orissa, we must figure out a way so that aspiring doctoral students do good research as part of their dissertation.

We have the following plan. Most Orissa universities allow qualified people outside the university to serve as guide to doctoral students. For that, the person needs to submit a bio-data to the University and get the necessary approval. In this regard I have contacted Dr. Sanghamitra Mohanty of the Department of Computer Science and Applications of Utkal University. I hope to be approved as a guide there. Several students from Bhubaneswar have contacted me and expressed their desire to pursue a dissertation with me. As a start I have asked them to read a book and certain basic papers related to my research interest. KIIT has kindly agreed to provide us with their facilities so that I can guide these students. Our plan is that the students will meet regularly at KIIT and discuss papers, including ones that I assign them, and once in a while I will join

them over the phone. My hope is that these group of students will learn from each other and from me. Some of them will be able to visit me in US for short period of time, and I will spend my winter vacation in Bhubaneswar working with them in person. Rest of the year we will be in touch by email and phone, and perhaps soon by PC based video conferencing. Thus I will have a virtual research group in Bhubaneswar. In future, I envision undergraduate and masters students as part of this group, with some of them joining me in US or other research centers in that field for their higher studies. This plan is still at its infancy and I hope other researchers (in IT or other areas) think about similar schemes. It seems that the private institutions (such as KIIT) are eager to help in such endeavors and many of their faculty are interested in pursuing a Ph.D through such arrangements. I would be happy to discuss this further with any one who is interested.

Finally, to wrap-up I would like to say that the B.Sc (Hons) program in Computer Science in Orissa colleges that was pushed by NROs -- during July to Dec 97 -- has been operational since Fall 98. Last December I met several faculty from BJB and RamaDevi colleges who are teaching classes in this program. They all liked the initiative very much, but also had some concerns. During my stay I tried my best to bring those concerns to the notice of people in charge of the program.

These are some of the things that we have been doing, and plan to do. I would welcome any feedback on these, and any suggestion on future directions. As always I welcome volunteers to help us with our initiatives.

#### What You Can Do??

Durga Misra dmisra@megahertz.njit.edu

- **Be a Donor Member:** This will help you to shape the activities of OITS with your personal vision and dreams to make Orissa a better place with Information Technology. For example, you can provide a particular college with e-mail access by just recommending it and OITS volunteers will make sure of that.
- **Donate a Book:** If you have an Information Technology related book please donate it to the OITS library in Bhubaneswar so that students and IT faculty can learn more about the technology. You can even collect some books and give it to some member in USA or Canada so that they can send them to Bhubaneswar.
- Give Seminar or a Short Course: If you are a IT expert and visiting Orissa please contact any of the OITS members there to organize a seminar or a short course. They will be glad to arrange one. Besides, Council of Industrial Research (CSIR) or All India Council for Technical Education (AICTE) could sponsor such an activities if you inform ahead of time. That will facilitate for many faculty members and students to come to your course
- **Design a Course or Curriculum:** Provide information to design an IT related course (you have currently taken or you are in teaching profession). You can also recommend a certain curriculum for the computer science programs in degree colleges in Orissa that will enhance IT knowledge and make the fresh IT graduates marketable.
- Help Organizing National or International Conferences: There is a large need to organize national and international conferences in Orissa. You can present a paper, review some papers or even chair/organize a particular session in the conference.
- **Give Ideas:** Just give ideas to take IT to the grassroot level. Your ideas could make every individual in Orissa familiar with e-mail, Internet and other web based activities such as E-Commerce



## Abstract of Accounts of Orissa Information Technology Society (OITS) for the financial year 1998-1999

#### **Credit in Rupees:**

#### **Debit in Rupees:**

(a) Patron(1) and donor members	(10): 78,785.00	(a) For CIT'98:	5,000.00
(b) Life members(75):	37,471.00	(b) Transferred to	
(c) Institutional member(1):	1,500.00	CIT98 as in (e):	35,000.00
(d) Annual members(4):	300.00	(c) EC meetings:	244.00
(e) Received for CIT'98:	35,000.00	(d) Office continger	ncy: 468.50
(f) Bank Interest:	161.00	(e) Furnitures	
(g) Extra deposit by treasurer:	2.50	(almirah):	3,300.00

Total 1,53,219.50 44,012.50

Thus, balance on 31st March,1999 is: Rs.1,09,207.00

This consists of fixed deposits on 23.3.99 with details as below:

- (a) Rs.25,000.00 for 15 months (deposit no. 415352)
- (b) Rs.25,000.00 for 27 months (deposit no. 415353)
- (c) Rs.25,000.00 for 39 months (deposit no. 415354) and
- (d) Rs.34,207.00 in the Syndicate Bank Ac. No. 7382.

(S.P. Misra)
President, OITS.

(P.K. Behera)
Treasurer, OITS.



#### up-to June, 25th 1999

#### S.P. Misra

Sl. Name & Affiliation	Membership Tel.no. e-mail /no.
1. S.P. Misra Inst. Phys.	P98/1 440810 spmisra@dte.vsnl.net.in
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8. M. Naik OUAT, cet	L98/8
9. K.N. Bhagat IISIT	L98/9 452101
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20. G. Mudali NIST, B'pur	A98/20	332421	
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BU,cs 51. B.K. Ratha UU,csa 52. S.K. Mohanty OCAC 53. R.K. Malu OCAC 54. R.K. Ghosh	L98/51 582587  L98/52 440309  L98/53	5
BU,cs 51. B.K. Ratha UU,csa 52. S.K. Mohanty OCAC 53. R.K. Malu OCAC 54. R.K. Ghosh iit,kanpur 55. P.K. Pradhan	L98/51 582587  L98/52 440309  L98/53  L98/54 597645	5
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77. Aruna Tripathy IGIT,sarang	L98/77	6760-40814	
78. Dr. Sabita Baboo BBSR	L99/78	442731	

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81. Raja Sarangi U.hyd	L99/81		
82. Kishor Sahu U.hyd	L99/82		
83. Sharmistha Parida U.hyd	L99/83		
84. M. Rakhee Rao U.hyd	L99/84		
85. D.R. Hembram U.hyd	L99/85		
86. J.K. Nayak U.hyd	L99/86		
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88. Veena Goswami KIIT	L99/88	441996	veena@stpbh.soft.net
89. S.K. Senapati KIIT	L99/89	443271	kiit@stpbh.soft.net
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91. A. Mishra tivoli,USA	D99/91		adi@tivoli.com
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92. D. Panigrahi Un. Hyderabad	L99/92		
93. S.K. Sahoo HCL Tech, Chenai	L99/93		
94. Aparajita Mishra lucent tech, USA	D99/94		aparajitamishra@lucent.com
95. P. Sarangi jpmorgan, USA	D99/95		sarangi_p@jpmorgan.com

#### A Collection of Orissa Related Web Sites

Prof. Chitta Baral

http://kalinga.com/golchha/ Golchha pigments pvt ltd.

http://kalinga.com/kfpl/ Krishna Ferro products Ltd, Rourkela.

http://kalinga.com/ronline/ Rourkela On Line

http://kalinga.com/sarvesh/ Sarvesh refractory Ltd, Near Rourkela

http://kenilworth.allindia.com/ Kenilworth (Under Constr)
http://members.tripod.com/~OSA\_DC OSA Dc chapter
http://members.tripod.com/~recrkl/ REC Rourkela
http://members.xoom.com/nistbam NIST Berhempur
http://rprcorissa.org Regional plant resource ctr
http://sreechem.com/ Sreechem resinst ltd, Rourkela
http://welcome.to/oriyahomepage An Oriya home page

http://www.ALLORISSA.COM Under Constr http://www.BARIPADA.COM Under constr http://www.BARIPADA.NET Under constr http://www.RAVENSHAW.EDU under constr

http://www.aiol.com All India On line, BBSR (a mini portal)

http://www.aliancecom.com/ aliance computer telephony, Bhadrakh (BBSR STP unit)

http://www.angelfire.com/or/odissi/ A site about Odissi http://www.appoloconstruction.com/ Appolo Constr, BBSR

http://www.balasore.net Under constr

http://www.bengineers.com B. Engineers and buildres, BBSR

http://www.berhampur.net Under constr http://www.bhubaneswar.com Under Constr

http://www.bme.jhu.edu/~bdas/bhajan.html Oriya bhajan news http://www.celmex.com/ An ISTI/AIOL venture in Mexico

http://www.chilika.com/ Chilika

http://www.comat.com/ A Dallas based company w. Oriya links? http://www.cs.columbia.edu/~deba Debasmita's Orissa home page http://www.cs.columbia.edu/~deba/ornet/ornmain.shtml Ornet info page

http://www.cs.utexas.edu/users/darshan/ORISSA/ Darshan's Orissa home page

http://www.cs.utexas.edu/users/darshan/SEEDS/orissa/ Old SEEDS page http://www.cse.iitb.ernet.in/~ashishk/Orissa Ashish's Orissa home page

http://www.csmpl.com/orissa/ Cybertech s/w and mm, BBSR

http://www.cuttack.net/ Cuttack, the silver city

http://www.cvberorissa.com/FP/TempleMain.htm Temples and monuments of Orissa

http://www.dpep-orissa.org/ Orissa primary ed prog authority http://www.esspl.com Enterprise system soln, a BBSR STP unit http://www.ftmax.com/osa OSA web page (possibly old) http://www.geocities.com/Colosseum/Stands/9032/OSA'99 Toronto

http://www.hindifilm.com An aiol site http://www.iedso.org IEDSO http://www.imfagroup.com/ IMFA

http://www.indiatours.com/sunderga.htm Hotels in Sundergarh

http://www.inf.com INFOSYS

http://www.infophil.com/India/Alumni/Orissa.html India alumni net, Orissa

http://www.iopb.res.in Inst of Physics

http://www.istinet.com/ Int Sc and Tech Info networks, AIOL parent

http://www.itao.com http://www.kalinga.com http://www.kalinga.net

IT association of Orissa Rourkela based mini portal BBSR based mini portal

http://www.kalinga.net/cart/ Center for action, res. and training, BBSR

http://www.kalingabuildersgroup.com/ Kalinga bldrs, BBSR http://www.kiit.org/ Kalinga inst of ind technology, BBSR http://www.lepra.org.uk/hoina.htm Leprosy res trust, Muniguda, Orissa http://www.lnsel.com Lee and Nee software, a BBSR STP unit

http://www.looklook.com plans to be a search portal

http://www.marutiestates.com/ Maruti estate, BBSR

http://www.meadev.gov.in/states/or/or.htm Discover India, Orissa page

http://www.milanbuilders.com/ Milan builders, BBSR

http://www.nalcoindia.com/ NALCO

http://www.neuronconsultants.com A CTC based software company

http://www.neuronindia.com A CTC based software company

http://www.oberoihotels.com/bhubm.htm Oberoi Hotel, BBSR

http://www.odissi.com An Orissa homepage and mini portal

http://www.oits.org Orissa Info Tech Society

http://www.orierc.org/ Orissa electricity regulatory commission

http://www.orissa-handloom.com/ ORISSA Handlooms page

http://www.orissa-tourism.com Orissa toursim

http://www.orissa-tourism.com/discover Discover tours and travels, BBSR

http://www.orissa-tourism.com/gardeninn Garden Inn, BBSR

http://www.orissa-tourism.com/grand Hotel Grand central, BBSR

http://www.orissa-tourism.com/otdc Orissa tourism dev corp

http://www.orissa.net A mini portal

http://www.orissa.org Govt of Orissa home page

http://www.orissaindia.com A mini portal with daily news

http://www.orissaindia.com/arya/ Arya constr, BBSR

http://www.orissaindia.com/bharatudyog/ Bharat Udyog, BBSR

http://www.orissaindia.com/bhubaneswarhotel/ Bhubaneswar Hotel, BBSR

http://www.orissaindia.com/cpsw/ Council of prof social workers, NGO

http://www.orissaindia.com/hitech/ Hi-tech estates

http://www.orissaindia.com/hotelkonark/ Konark hotel, Puri

http://www.orissaindia.com/ibat/ Inst of Business ad and training, BBSR

http://www.orissaindia.com/krishnagroup/ Krishna builders, BBSR

http://www.orissaindia.com/mba utkal univ/ Dept of Bus ad, Utkal U, BBSR

http://www.orissaindia.com/orupa/ Orissa rural and urban prod assn, Art and craft of Orissa, BBSR

http://www.orissaindia.com/purihotel/ Puri Hotel, Puri

http://www.orissaindia.com/rgvn/ Rashtriya gramin vikas nidhi

http://www.orissaindia.com/royalcastle/ Royal Castle, handicrafts, BBSR

http://www.orissaindia.com/sishmo/ Sishmo Hotel, BBSR

http://www.orissaindia.com/suncity/ BBSR based builder

http://www.orissaindia.com/sunelectronics/ Sun electronics, BBSR

http://www.orissaindia.com/templecitydevelopers/ BBSR based builder

http://www.orissaindia.com/utkalbuilders/ BBSR based builder

http://www.orissaindia.com/victor/ Victoria club hotel, Puri

http://www.orissakhabar.com Dharitri, BBSR based newspaper

http://www.orissasambad.com Sambad, BBSR based newspaper

http://www.orissasociety.org OSA home page

http://www.orissatv.com/ Oriya TV in the web

http://www.oshb.com Orissa state housing board

http://www.pannetcorp.com/ PanNet computer (sells CD-ROM on Orissa)

http://www.paradeep.com under constr http://www.paradeep.net under constr

http://www.rourkela.net under constr

http://www.ruchispices.com/ Ruchi Spices, BBSR

http://www.sambalpur.com under constr http://www.sambalpur.net under Constr

http://www.sambit.com/ An oriya internet literary magazine http://www.satyam.com Satyam Computer services ltd, BBSR

http://www.sbconstructions.com/ S. B. Consultancy and Constr, BBSR

http://www.seedsnet.org Home page of SEEDS

http://www.sscreation.com/ S. S. Creations, Orissa handicrafts

http://www.stpbbsr.stpbh.soft.net/Bda Folder/bda.htm BBSR dev authority

http://www.stpbbsr.stpbh.soft.net/units.htm Units of STP BBSR. http://www.stpbh.soft.net/ Software tech park, BBSR

http://www.stpbh.soft.net/cifa Central inst of freshwater acqua cltr

http://www.stpbh.soft.net/osfc/ Orissa state financial corp http://www.stpbh.soft.net/rrl/ Regional research laboratory http://www.sungranite.com/ Sun granite exports ltd, BBSR

http://www.swosti.com/ Swosti Hotels

http://www.tajakhabar.com mini portal and news, An ISTI/AIOL venture http://www.tajamail.com Free web based email, An ISTI/AIOL venture. http://www.tajasamachar.com mini portal and news, An ISTI/AIOL venture

http://www.ximb.stpbh.soft.net/ Xaviers Inst of Management, BBSR



# **OITS**Orissa Information Technology Society





#### [A unit of Department of Telecommunications (DoT), Government of India]

#### (Providing Vital Infrastructure for Nation Building)

Powered with New Technology, Orissa Telecom looks forward to Seamless Integration

#### Switching

- All 800 Exchanges are Digital Electronics Exchanges with 0.4 million lines capacity & 0.37 working lines
- Major cities have new tech switch with CCS-7 signaling & ISDN
- TAX (Trunk Auto Exchange) at Cuttack is of OCB (Alcatel) type & ESWD (Siemens) type at Cuttack

#### Transmission

- Long Distance media predominantly Fibre Optic is of 3500 kms at present and shall increase to 8000 km by year 2001
- Satellite Earth Hub Station at Bhubaneswar
- For inter-exchange junctions, cities like Bhubaneswar, Cuttack, Rourkela, Sambalpur, Berhampur, Balasore, Jeypore, Puri etc have local OFC (Optical Fiber Cable)

#### Internet

- Internet available throughout the state from central ISP node at Bhubaneswar
- By turn of century, all Secondary Switching Area headquarters which are co-terminus with old 13 revenue districts of Orissa will have separate ISP nodes
- Internet capacity expected to touch 25,000 by year 2000

#### **New Services**

- I-net services (X.25, X.28) available at Bhubaneswar, Cuttack, Rourkela & Sambalpur
- IN (Intelligent Network) services available at Bhubaneswar & Cuttack

#### Computerization

- Computerized single window customer service centers available at Bhubaneswar, Cuttack, Rourkela, Sambalpur, Berhampur, Puri etc
- Computerized Telephone Billing & Accounting done at all 11 Telecom District Headquarters
- Fault Repair Service, Directory Enquiry etc computerized
- Automatic Fault Booking, Billing Enquiry, Changed number enquiry available at major cities

#### **Our Ambitions**

- To provide Cellular service by year 2000
- SDH rings for transmission media
- ATM Switch, Frame Relay, B-ISDN, IP on ATM

#### **About Orissa**

Area: 0.15m sqkm Population: 31.6m

This is a land of temples, abode of spirituality and a paradise for tourists. To match this glory, Orissa Telecom is striving its at <a href="http://www.dotindia.com/orissa">http://www.dotindia.com/orissa</a> at <a href="http://www.dotindia.com/orissa">http://www.dotindia.com/orissa</a> to modernize its systems to provide high quality & hi-tech telecom services.

Tele Density: 1.1%



http://www.angelfire.com/or/orissatelecom