Prof. Alan Rux and Vice Chairman Sir were received by Principal Dr. G. Srinivasa Rao at railway station. All the ATL members along with Vice Principal Dr. P. Srinivasa Raju welcomed them at the guest house in the campus. The inaugural function for the workshop on assistive technology -2013 started at 10.00 AM. Vice Chairman sir, Vice Principal Sir, Dr. K. Pushpa HOD ATL, other ATL faculty guides, supporting staff and students were present on the function. Vice- Principal sir welcomed the resource person and appreciated the students’ attitude for staying back even during tough times. Vice- Chairman sir addressed the students and explained how Prof. Rux would like to share his abundant knowledge amongst us. He also stressed the importance of faculty mentors in making the ATL projects.

Later Prof. Rux addressed all the faculty mentors and trained them of how to make a good project proposal presentation.

In the afternoon we had project proposal presentations by the students. Prof. Alan Rux and VC sir advised students some constructive modifications.
The projects finalized after the discussions are listed below:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Project Name</th>
<th>Faculty Guide</th>
<th>Students Involved</th>
</tr>
</thead>
</table>
| 1.     | Robotic Meal Feeder           | Mrs. G. Lakshmi                | P. Vasavi Chandra IV ECE SVECW  
P. Tushara III EEE SVECW  
K. Swapna Durga, IV ME, SVECW  
G. Bhavana II B.SC(MECS), BVRICE  
A. Mani Kumari, III DECE, SBSP |
|        | Abstract: It is a robotic arm which helps the elderly and physically challenged people to take their food. |                                |                                                                                 |
| 2.     | Smart Math Trainer            | Mr. D. NarasimhaRaju           | Y.Purnima IV ECE SVECW  
P. Veena Madhuri IV IT SVECW  
R. Rama Madhuri II B.SC(MECS) BVRICE  
P. Revathi II B.SC(MECS) BVRICE  
Y. Vishwaja III EEE SVECW |
|        | Abstract: It is the trainer which helps to visually challenged people to learn math tables & perform math calculations also. |                                |                                                                                 |
| 3.     | Snoezelen Bubble Tube         | Mr. Ch. Sambasivarao           | K. Krishna Harika III ECE SVECW  
N. Ramya Krishna III ECE SVECW  
I. Naga Priyanka IV CSE SVCEW  
A. Priyanka Mouni III DECE SBSP |
|        | Abstract: It is device which is used for mentally challenged people when they are in depressing mood. |                                |                                                                                 |
| 4.     | An Intelligent Health Monitoring System | Mr. R. Viswanadham and Dr. K. Pushpa | B.M.M Meenakshi IV ECE SVECW  
K. Sindhu III ECE SVECW  
T. R. Keerthi III EEE SVECW  
Bh. Kusuma II BSC(MECS) BVRICE  
S. Navya III DECE SBSP |
|        | Abstract: To enhance the quality of life of elderly by continuous monitoring and alerting care taker. |                                |                                                                                 |
| 5.     | Versatile Wheel Chair         | Mrs. S. M. Padmaja             | A. Ramya III ECE SVECW  
R. Susmitha IV ECE SVECW  
G. Vasanthi IV ME SVECW  
Y. Lakshmi Prasanna III ECE SVECW |
|        | Abstract: Joystick control wheel chair and obstacle detector to enable elderly people and visually challenged to move independently. |                                |                                                                                 |
6. Color Identifier
Abstract: It is to detect the colors of papers, toys, clothes, etc helpful for people having color blindness.

<table>
<thead>
<tr>
<th>Mr. A. N. Kiran</th>
<th>N. Nirusha III ECE SVECW</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.D.V Pushpavalli III ECE SVECW</td>
<td></td>
</tr>
<tr>
<td>B.H.V.S. Prathibha III ECE SVCEW</td>
<td></td>
</tr>
<tr>
<td>J.G.S. Lavanya II B.SC(MECS) BVRICE</td>
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</table>

7. Interactive Wrist Band
Abstract: It is used for hearing impaired people to interact with other people of similar disabilities & also with some kinds of sounds.

<table>
<thead>
<tr>
<th>Mr. V. S. R. Pavan Kumar</th>
<th>P. Samatha III ECE SVECW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ch. Tejaswi IV IT SVECW</td>
<td></td>
</tr>
<tr>
<td>K. Tejaswi III EEE SVECW</td>
<td></td>
</tr>
<tr>
<td>B. Hema Anitha Devi III DECE SBSP</td>
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</tbody>
</table>

8. Succor
Abstract: It is used for assisting the elderly people in controlling the room light & opening and closing the door.

<table>
<thead>
<tr>
<th>Mr. K. Ramu</th>
<th>K. Bindu Lakshmi III ME SVECW</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. Deepika III ECE SVECW</td>
<td></td>
</tr>
<tr>
<td>V. S. Subba Lakshmi III ECE SVECW</td>
<td></td>
</tr>
<tr>
<td>Neelam Khilwani IV IT SVECW</td>
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</tbody>
</table>

9. Third Eye
Abstract: To make an object locating device using RF Modules for finding daily objects for visually challenged & elderly people.

<table>
<thead>
<tr>
<th>Mrs. K. Padma Vasavi</th>
<th>Puneeta Sreenivas III EEE SVECW</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH. Dhana Lakshmi IV IT SVECW</td>
<td></td>
</tr>
<tr>
<td>P. Madhuri III ECE SVECW</td>
<td></td>
</tr>
<tr>
<td>M. Mounika II B.SC(MECS) BVRICE</td>
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</tr>
</tbody>
</table>

Suggestions given for each batch of students are listed below:

<table>
<thead>
<tr>
<th>Batch No.</th>
<th>Suggestions</th>
</tr>
</thead>
</table>
| 1.        | - Make CAD designs to demonstrate their concepts  
- Need a motor with feedback  
- Search Robotshop for choosing the right motor  
- Robot Shop- Provides Educational discount  
- They have to specify the Integrated Development Environment they are working in their Lab record  
- They have to make a Gantt Chart specifying the number of hours instead of number of weeks |
<p>| 2.        | - Use a Digital Voice recorder instead of text to speech converter |</p>
<table>
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<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
|   | Consider making the project with telugu language  
|   | Use Eagle CAD tool instead of Multisim for PCB designing  
|   | Consider a good design for power supply section  
| 3. | Consider Safety of the user  
|   | Design a Base  
|   | Decide the height for the glass tube  
|   | Use LEDs from King Bright  
| 4. | Identify the symptoms for heart attack  
|   | Add Fall detector to the circuit  
|   | Add a motion detector also  
|   | Call it a health chair  
|   | Divide the project into two as it is complex  
| 5. | Consider using motors with gears  
|   | Design a good braking mechanism for the motor  
|   | Remove the complexities in the project  
|   | Avoid line detecting part  
|   | Consider using a “Transfer Chair”  
| 6. | Extend the project for counterfeit currency note detection  
| 7. | Consider placing a watch also in the circuit  
| 8. | Finish the prototype quickly and involve in the project “E-Stick with Camera”  
| 9. | Concentrate on making a good design as it is a project suitable for commercialization  
|   | Use “linx” transceivers instead of standard transceiver  

The projects Intelligent Health Monitoring system, Interactive wrist band, Third Eye are identified to be suitable for commercialization.

In the evening Prof. Aln Rux visited Assistive Technology Lab along with VC sir, Principal Sir. VC sir asked the opinion of Prof. Alan Rux regarding the new ATL. Prof. Rux suggested some modifications in the lab. Principal sir said he would arrange for doing the modifications in the lab by 12th Aug, 2013.

All the students stayed back in the lab till 2 am to do their projects.

Batch 1 students identified the existing robot arm in the ATL is suitable for their projects. They discussed with Prof. Alan Rux and got it confirmed. They started to work on the software implementation for controlling the motors.

Batch 2 students finished their complete programming for the over-all program and discussed with Prof. Rux on how to improve their project.

Batch 3 students studied the data sheets and experimented on the LED Strips.

Batch 4 students worked on writing a program for Pulse width modulation using microcontrollers.

Batch 5 students studied the existing wheel chair in the project and discussed on some issues regarding the joy-stick they are using in their project.

Batch 6 students experimented with the color sensors.
Batch 7 students worked on designing the pre-amplifier circuit and converting the analog signal from pre-amplifier into a digital signal using microcontrollers. Prof. Alan Rux explained and demonstrated them the “filter-pro” tool for designing the circuit they needed.

Batch 8 students finished the software implementation of their project and demonstrated it to Prof. Rux.

Batch 9 students also finished programming a part of their project

VC sir was also there in the lab discussing with the students, faculty mentors, technicians and advising them for improvements in their performances

Some pictures of the day