1st Joint Workshop on Beamline Technology

Feb. 27 (Mon) 13:30 – 18:00 (coffee break included)
Coordinator: E. Shigemasa (UVSOR)

13:30 – 13:40  Preface  E. Shigemasa (UVSOR)
13:40 – 14:40  Fundamental aspect of high heat-load frontend components  N. Takahashi (JASRI)
14:40 – 15:40  Basic concept on double crystal monochromators as a high heat load component  T. Goto (JASRI)
15:40 – 16:00  Coffee break
16:00 – 17:00  Design concept on a new generation monochromator for soft X-ray emission spectroscopy and related basic technology  T. Hatsui (IMS)
17:00 – 18:00  Principium of soft X-ray monochromator ~ Challenge towards realizing the ultimate performance monochromator ~  K. Amemiya (Univ. Tokyo)
18:00 – 18:30  Short tour to UVSOR
18:30 –  Banquet

Feb. 28 (Tue) 9:30 – 15:00 (coffee break included)
<First session>  Coordinator: H. Ohashi (JASRI)

9:30 – 10:15  Manufacture of a transmission grating soft X-ray monochromator  T. Horigome (UVSOR)
10:15 – 11:00  Current situation against heat load problems at UVSOR  E. Nakamura (UVSOR)
11:00 – 11:15  Coffee break
11:15 – 12:00  Cooling systems for double crystal monochromators at KEK-PF  Y. Uchida (KEK-PF)
12:00 – 13:00  Lunch

<Second session>  Coordinator: H. Ohashi (JASRI)

13:00 – 13:45  Countermeasure against high heat-load to double crystal monochromators  H. Yamazaki (JASRI)
13:45 – 14:30  Development of a surface profile measuring instrument for optical elements  Y. Higashi (KEK-PF)
14:30 – 15:00  Summary & perspective (panel discussion)  H. Ohashi (JASRI) & E. Shigemasa (UVSOR)
15:00 – 15:10  Closing remarks  N. Kosugi (UVSOR)
2nd JSSRR Wakate Workshop on Next Generation Light Sources
~ Future Science Developed by New Light Source ~

Place: Okazaki Conference Center

August 8, 2005
[Chairperson: S. Kimura]

14:00- Preface S. Kimura (UVSOR)
14:10- Interim report of the next generation light sources committee Y. Amemiya (Univ. Tokyo)
14:40- Possibility of X-FEL and SCSS project T. Ishikawa (RIKEN)
15:15- ARC-EN-CIEL, the present FEL activity and the scientific case M.E. Couprie (CEA)
15:50- Coffee break

[Chairperson: K. Mase]

16:10- Present status of plasma x-ray laser and expectation to X-FEL K. Nagashima (JAERI)
16:45- Possibility of the use of X-FEL extended from the present SR M. Yabashi (JASRI)
17:15- Applications of X-FEL (Examples of LCLS) K. Hirano (KEK-PF)
17:30- Discussion: Future science with X-FEL T. Ishikawa (RIKEN)
18:30- Banquet

August 9, 2005
[Chairperson: K. Harada]

8:30- Limit of present SR and requests to next generation light sources H. Tanaka (JASRI)
8:55- Possibility of ERL for ring-type light source R. Hajima (JAERI)
9:20- Next generation ring-type and ERL light sources S. Sakanaka (KEK-PF)
9:45- Coffee break

[Chairperson: K. Amamiya]

10:00- Present and future of photoemission spectroscopy of solids K. Shimada (Hiroshima Univ.)
10:25- Present and future of structural physics H. Sawa (KEK-PF)
10:50- Future of structural biology using SR S. Wakatsuki (KEK-PF)
11:15- Present and future of spectroscopy of atoms and molecules E. Shigamasa (UVSOR)
11:40- Present and future of x-ray imaging Y. Kagoshima (Univ. Hyogo)
12:05- Discussion chair: M. Takata (JASRI), Panelist: T. Kinoshita (JASRI) & H. Kawata (KEK-PF)

# The workshop was organized by The Japanese Society for Synchrotron Radiation Research and was sponsored by UVSOR.
**UVSOR User's Union (UUU) Users Meetings**

**27 Feb. 2006 (Mon)**

13:00 - 13:30 reception  

13:30 - 13:35 Opening remarks  

13:35 - 13:50 Current status of UVSOR  

13:50 - 14:20 Present Status of UVSOR-II Accelerators  

14:40 - 15:10 Present status of the undulator beamline BL3U  

15:10 - 15:40 Light source developments at UVSOR-II  

15:40 - 16:10 IR absorption reflection spectroscopy at BL6B  

16:30 - 17:00 Quantitative evaluation of electron transport properties by use of high-resolution angle-resolved photoemission spectroscopy  

17:00 - 17:30 Recent development of photoelectron spectroscopy of metallofullerenes  

17:30 - 18:00 Various spin reorientation transitions induced by molecular adsorption on magnetic thin films  

18:30 - 20:30 Get-together Party

**28 Feb. 2006 (Tue)**

9:00 - 9:30 Structural Analysis on the Amorphous Carbon Thin Films Using C K-Edge NEXAFS Development of quantitative structural analysis by using XANES and an attempt to micro component detection  

9:30 - 10:00 Core exciton measurements using synchrotron radiation and laser light  

10:00 - 10:30 Poster session lunch  

13:30 - 14:00 Phase observation of reflection multilayer using reflection and total electron yield spectra  

14:00 - 14:30 Synchrotron radiation spectroscopy of biomolecules  

14:30 - 15:00 discussion

**OCC**  
(Oral:2F conference room, Poster & Get-together Party:1F conference room)

**chairman K. Soda (Nagoya Univ.)**  
UUU president K. Soda  
facility head N. Kosugi  
UVSOR M. Kato  

**chairman S. Hino (Chiba Univ.)**  
IMS T. Hatsui  
UVSOR M. Kato  
UVSOR Y. Sakurai  

**chairman K. Soda (Nagoya Univ.)**  
Nagoya Univ. T. Takeuchi  
Chiba Univ. S. Hino  
IMS T. Yokoyama  

**chairman K. Fukui (Univ. of Fukui)**  
Hyougo Pref. K. Kanda  
Nagoya Univ. T. Yoshida  
Osaka Dent. T. Tsujibayashi  

**chairman K. Hayashi (Gifu Univ.)**  
Hyougo Pref. Univ. K. Kanda  
Nagoya Univ. T. Yoshida  
Osaka Dent. Univ. T. Tsujibayashi  

Kobe Univ. K. Nakagawa  
Tohoku Univ. T. Ejima
<table>
<thead>
<tr>
<th>No.</th>
<th>Author</th>
<th>Affiliation</th>
<th>BL</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>K. Kanda</td>
<td>Hyogo Pref. Univ.</td>
<td>8B1</td>
<td>Structural Analysis on the Amorphous Carbon Thin Films Using C K-Edge NEXAFS</td>
</tr>
<tr>
<td>P2</td>
<td>Y. Izumi</td>
<td>Kobe Univ.</td>
<td>5B</td>
<td>Silicon K-edge XANES measurement of left- and right-handed quartz crystals</td>
</tr>
<tr>
<td>P3</td>
<td>K. Soda</td>
<td>Nagoya Univ.</td>
<td>5U</td>
<td>3p-3d Resonant Photoemission of Heusler-type Fe$<em>2$VAl$</em>{1-x}$Si$_x$</td>
</tr>
<tr>
<td>P4</td>
<td>H. Miyazaki</td>
<td>Nagoya Univ.</td>
<td>5U</td>
<td>Angle resolved photoemission of Fe$_2$VAl Heusler-type alloy</td>
</tr>
<tr>
<td>P5</td>
<td>T. Mochizuki</td>
<td>Nagoya Univ.</td>
<td>5U</td>
<td>3p-3d Resonant Photoemission of Heusler-type (Fe$_{1-x}$M$_x$VAl(M=Ir, Pt)</td>
</tr>
<tr>
<td>P6</td>
<td>T. Suzuki</td>
<td>Nagoya Univ.</td>
<td>5U</td>
<td>SR photoemission of Zr bulk metal glasses</td>
</tr>
<tr>
<td>P7</td>
<td>S. Ohta</td>
<td>Nagoya Univ.</td>
<td>5U</td>
<td>Photoelectron Spectroscopy of Pd-based Bulk Metallic Glasses with use of Synchrotron Light</td>
</tr>
<tr>
<td>P8</td>
<td>M. Imamura</td>
<td>Kobe Univ.</td>
<td>5U</td>
<td>Photoemission study of organic-metal hybrid nanoparticles : Prospect of research for the fluorescent Au nanoclusters encapsulated within dendrimer templates</td>
</tr>
<tr>
<td>P9</td>
<td>T. Kamikake</td>
<td>Kobe Univ.</td>
<td>5U</td>
<td>Photoemission study of alkyl-passivated Si nanoparticles</td>
</tr>
<tr>
<td>P10</td>
<td>M. Kitaura</td>
<td>Fukui Nat. Col. Tech</td>
<td>7B</td>
<td>Excitation processes of long lasting afterglow in SrAl$_2$O$_4$:Eu,Dy phosphors</td>
</tr>
<tr>
<td>P11</td>
<td>K. Hayashi</td>
<td>Gifu Univ.</td>
<td>5B</td>
<td>Photoinduced phenomena in amorphous chalcogenide semiconductors</td>
</tr>
<tr>
<td>P12</td>
<td>K. Mitsuke</td>
<td>IMS</td>
<td>2B2</td>
<td>Pulsed ZEKE spectroscopy of fullerenes: setup and performance</td>
</tr>
<tr>
<td>P13</td>
<td>T. Yokoyama</td>
<td>IMS</td>
<td>4B</td>
<td>Various spin reorientation transitions induced by molecular adsorption on magnetic thin films</td>
</tr>
<tr>
<td>P14</td>
<td>T. Nakagawa</td>
<td>IMS</td>
<td>4B</td>
<td>Possibility of UV MCD Photoelectron Microscope</td>
</tr>
<tr>
<td>P15</td>
<td>T. Miyazaki</td>
<td>Ehime Univ.</td>
<td>8B2</td>
<td>Valence&amp;band structure and selective oxidation of Li-Ni complex oxide system</td>
</tr>
<tr>
<td>P16</td>
<td>Y. Nakajima</td>
<td>Univ. of Fukui</td>
<td>7B</td>
<td>Luminescence properties of YPO$_4$:Mn codoped with Zr</td>
</tr>
<tr>
<td>P17</td>
<td>N. Nakagawa</td>
<td>Univ. of Fukui</td>
<td>1A,8B1,7B</td>
<td>Excitonic Emission Spectra and Time Resolved Decay Curves of AlGaN Alloys</td>
</tr>
<tr>
<td>P18</td>
<td>N. Nakagawa</td>
<td>Univ. of Fukui</td>
<td>5B,8B1,7B</td>
<td>Visible - UV Emission Spectra in III - V Nitride Semiconductors by Using High Energy Excitation and Excitation Energy Dependence</td>
</tr>
<tr>
<td>19</td>
<td>M. Ohta</td>
<td>Niigata Univ.</td>
<td>1B</td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>---------</td>
<td>---------------</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>T. Yokoyama</td>
<td>Chiba Univ.</td>
<td>8B2</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>T. Matsui</td>
<td>Kobe Univ.</td>
<td>7B</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>M. Ono</td>
<td>Chiba Univ.</td>
<td>8B2</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>N. Ohno</td>
<td>Osaka Elec Commun. Univ.</td>
<td>1B</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>N. Ohno</td>
<td>Osaka Elec Commun. Univ.</td>
<td>2B</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>S. Kimura</td>
<td>UVSOR</td>
<td>7U</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>S. Kimura</td>
<td>UVSOR</td>
<td>6B</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>T. Ito</td>
<td>UVSOR</td>
<td>5U</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>T. Ito</td>
<td>UVSOR</td>
<td>5U</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>J. Yamazaki</td>
<td>UVSOR</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>M. Hosaka</td>
<td>UVSOR</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>K. Takashima</td>
<td>Nagoya Univ.</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>H. Hayashi</td>
<td>UVSOR</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>A. Mochihasi</td>
<td>UVSOR</td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>J. Azuma</td>
<td>Saga Univ.</td>
<td>5U</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>K. Fukui</td>
<td>Univ. of Fukui</td>
<td>5B</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Y. Sakurai</td>
<td>UVSOR</td>
<td>6B</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>M. Kato</td>
<td>Chiba Univ.</td>
<td>8B2</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>T. Ejima</td>
<td>Tohoku Univ.</td>
<td>5B</td>
<td></td>
</tr>
</tbody>
</table>
UVSOR Lunch Seminar

FY2005

May 18  Dr. M. Ono, Graduate School of Science and Technology, Chiba University
Investigation of doping in organic thin film by using synchrotron radiation damage

May 25  Dr. K. HOTTA, R&D Center Technology & Engineering Division Lamp Company, Ushio INC.
EUV lithography and DPP EUV sources

July 12  Drs. M. Labat & G. Lambert, CEA, France
FEL saturation in case of UVSOR-II
Seeding a free electron laser in "High Gain Harmonic Generation" configuration with laser harmonics produced in gases

July 14  Prof. V.G. Stankevich, Russian Research Centre Kurchatov Institute, Russia and UVSOR
Optical investigations ferroelectric ordering C_{60}F_{18} single crystals

July 27  Prof. H. Xu, NSRL, University of Science and Technology of China
Present status and future plan of Hefei light source

Sept. 7  Dr. H.-D. Kim, Beamline Division, Pohang Accelerator Laboratory, South Korea
Present status and activities at Pohang Light Source

Dec. 20  Drs. S. Bielawski & C. Szwaj, Phlam/CERLA, France
Introduction to mode-locked lasers
Recent results obtained on the UVSOR FEL

Dec. 21  Dr. T. Nishi, Graduate University for Advanced Studies (SOKENDAI)
Electronic structure of a quasi-two-dimensional organic superconductor and development of infrared spectroscopy under multiextreme conditions

Mar. 22  Prof. L. Sheng, NSRL, University of Science and Technology of China
Introduce of the Hefei Light Source (HLS) and some experiments.