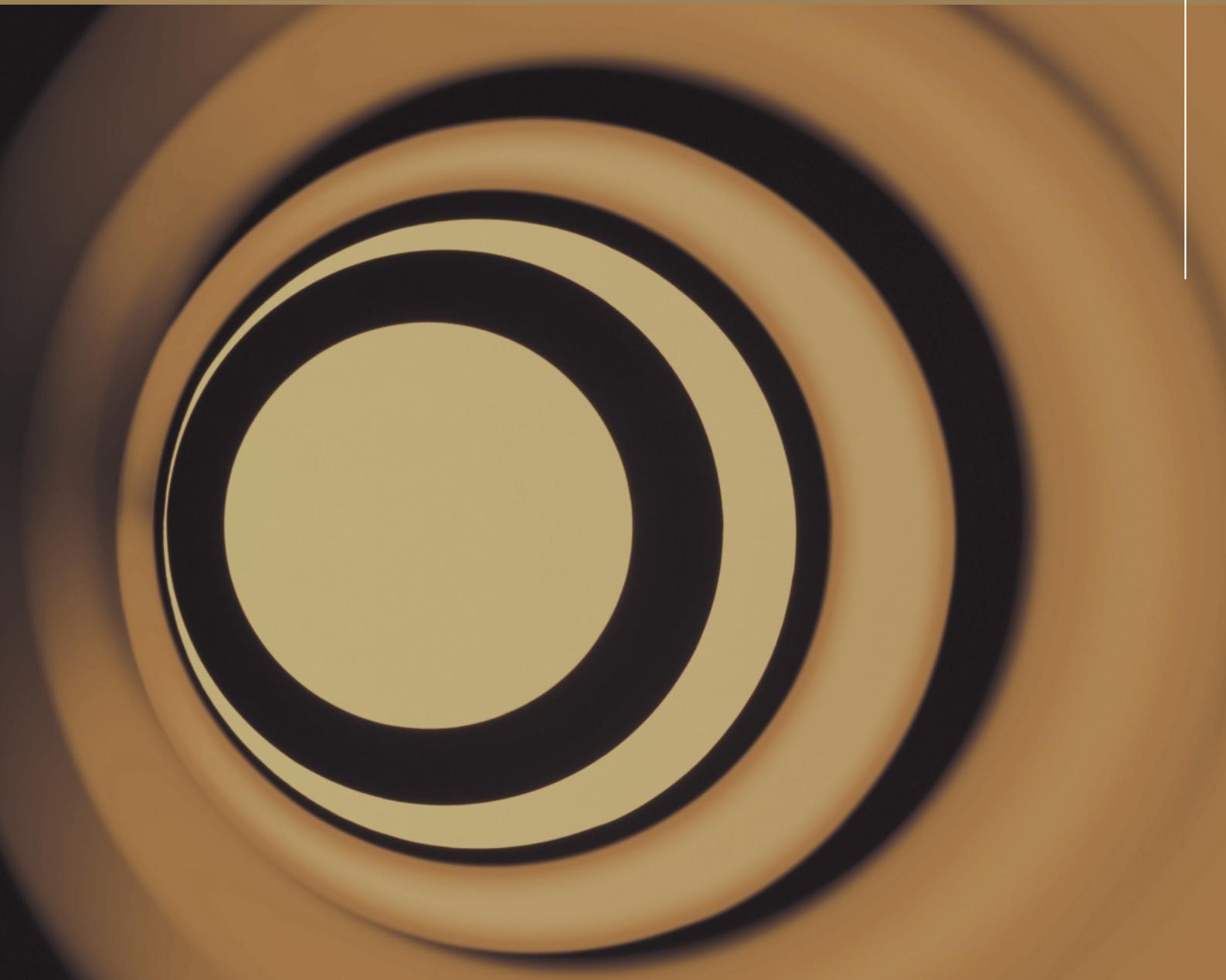


Appendices

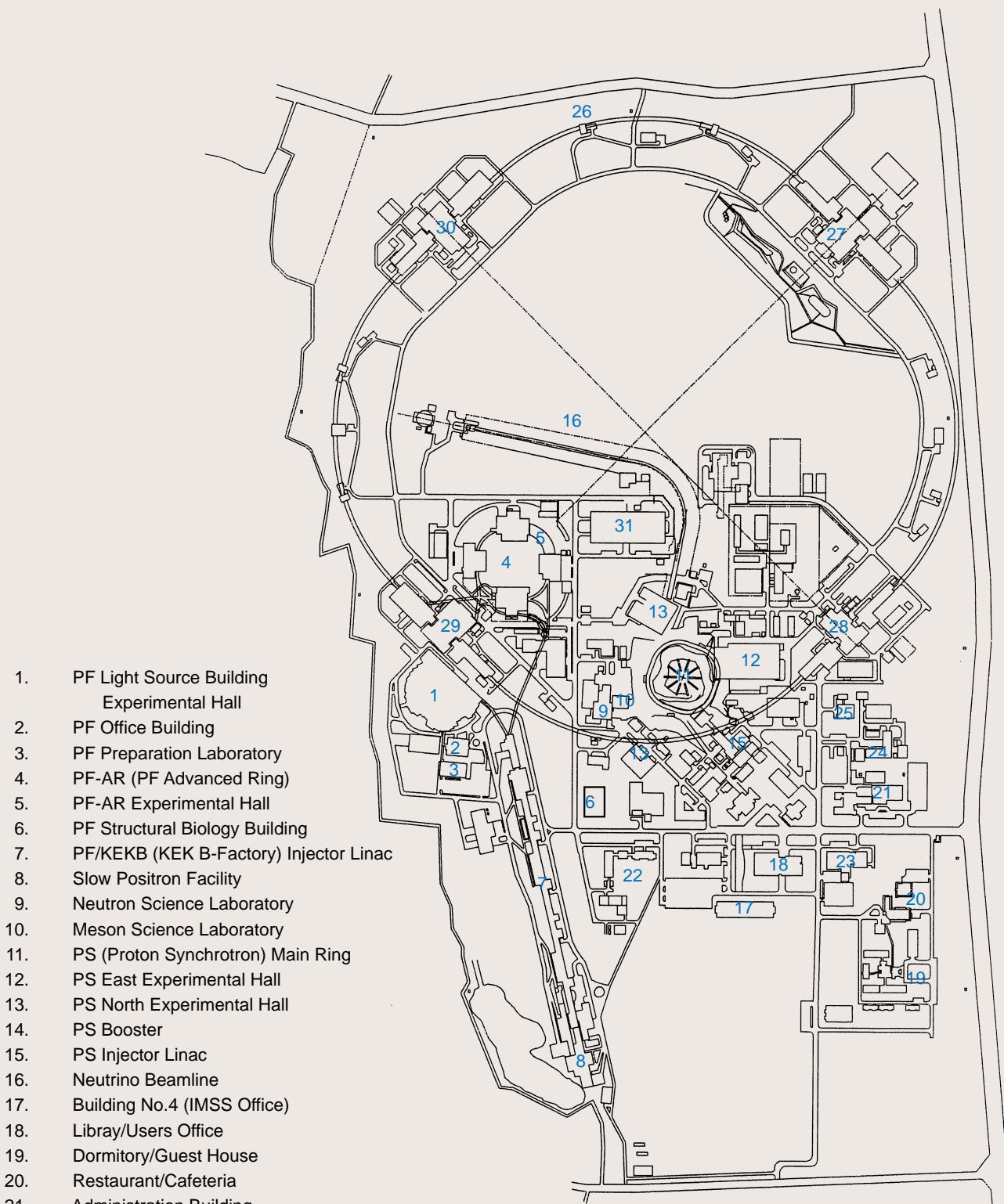


1. Site and Organization

Figure 1 shows the aerial view and corresponding site map of KEK.



Figure 1
Aerial view of the KEK campus.



1. PF Light Source Building
Experimental Hall
2. PF Office Building
3. PF Preparation Laboratory
4. PF-AR (PF Advanced Ring)
5. PF-AR Experimental Hall
6. PF Structural Biology Building
7. PF/KEKB (KEK B-Factory) Injector Linac
8. Slow Positron Facility
9. Neutron Science Laboratory
10. Meson Science Laboratory
11. PS (Proton Synchrotron) Main Ring
12. PS East Experimental Hall
13. PS North Experimental Hall
14. PS Booster
15. PS Injector Linac
16. Neutrino Beamline
17. Building No.4 (IMSS Office)
18. Library/Users Office
19. Dormitory/Guest House
20. Restaurant/Cafeteria
21. Administration Building
22. Radiation Science Center
23. Computing Research Center
24. Cryogenics Science Center
25. Mechanical Engineering Center
26. KEKB LER (Low Energy Ring) and
HER (High Energy Ring)
27. KEKB Tsukuba Laboratory (BELLE Detector)
28. KEKB Oho Laboratory
29. KEKB Fuji Laboratory
30. KEKB Nikko Laboratory
31. ATF (Accelerator Test Facility)

KEK consists of four research institutions, i.e., the Institute of Materials Structure Science (IMSS), the Institute of Particle and Nuclear Studies, the Accelerator Laboratory and the Applied Research Laboratory. The PF is a part of the IMSS together with the Neutron Science Laboratory and the Meson Science Laboratory, as shown in Fig. 2. The members of the Board of

Councilors and the Advisory Council for Scientific Policy and Management of the IMSS are listed in Tables 1 and 2. The organization chart of the PF is shown in Fig. 3. The PF consists of three divisions, i.e. the Experimental Facility Divisions I and II, and the Light Source Division. The PF staff members are listed in Table 3.

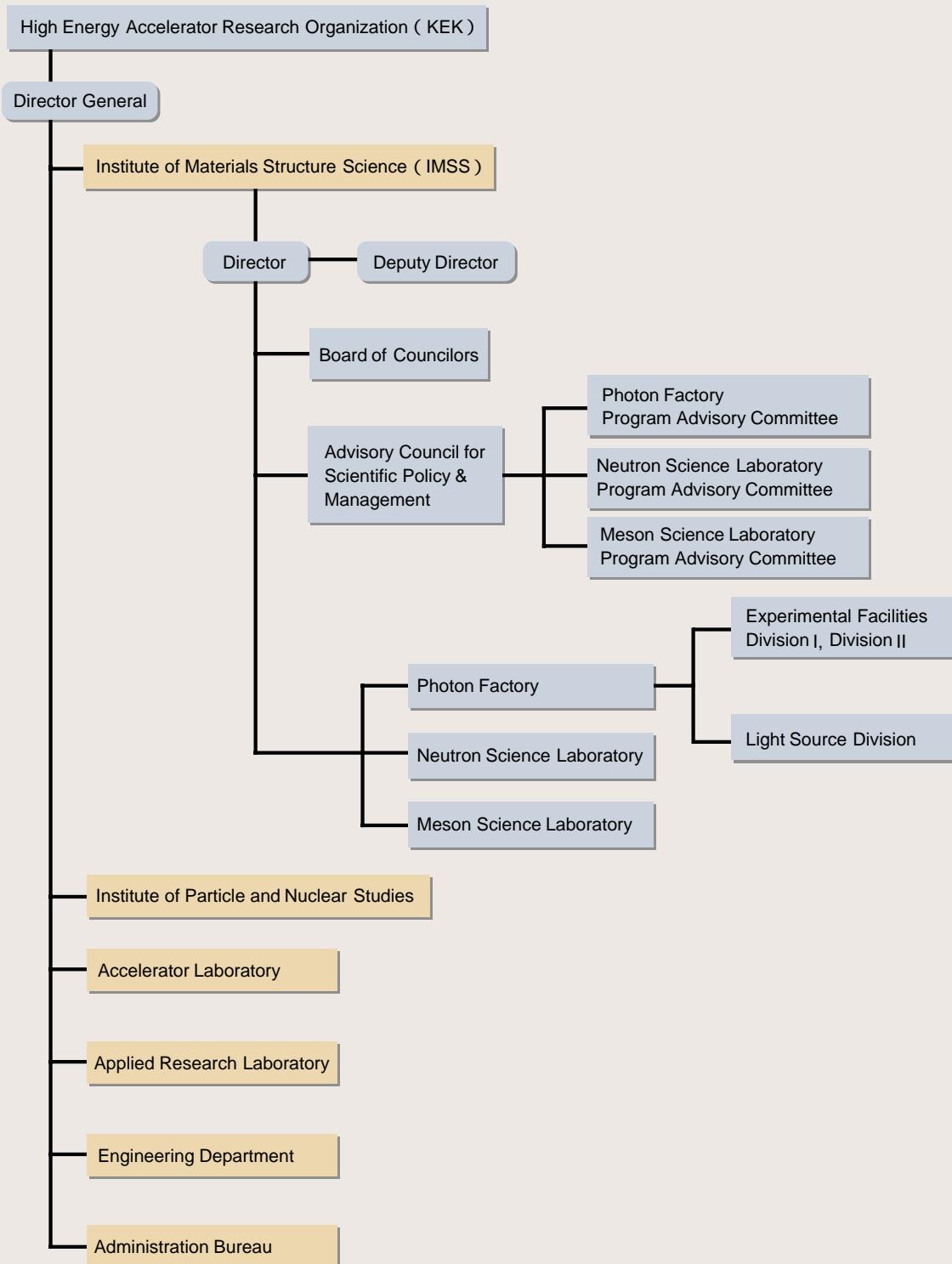


Figure 2
Organization chart of KEK.

Table 1 Members of Board of Councilors.

AWAYA, Yoko	Musashino Art University
CHIKAWA, Jyunichi	CAST Hyogo
FUKUYAMA, Hidetoshi	The University of TOKYO
GO, Nobuhiro**	Japan Atomic Energy Research Institute
GOHSHI, Yohichi	National Institute for Environmental Studies
HOTTA, Yoshiki	National Institute of Genetics
KAMIMURA, Hiroshi	Tokyo University of Science
KAMITSUBO, Hiromichi	The Institute of Physical and Chemical Research
KAYA, Kohji	Okazaki National Research Institute
KITAHARA, Yasuo	University of Tsukuba
KOBAYASHI, Shunichi	The Institute of Physical and Chemical Research
KODAIRA, Keiichi	The Graduate University for Advanced Studies
KOMA, Atsushi	The University of Tokyo
KURODA, Haruo*	University of Science
KYOGOKU, Yoshimasa	Fukui University of Technology
OGIUE, Koichi	Tokyo Metropolitan University
OKUSHIMA, Takayasu	Waseda University
TAKEDA, Yasutsugu	Hitachi Ltd.
YAMADA, Yasusada	Waseda University
YASUOKA, Hiroshi	Japan Atomic Energy Research Institute

Table 2 Members of Advisory Council for Scientific Policy & Management.

AKIMITSU, Jun	Aoyama Gakuin University
ENDO, Yasuo**	Tohoku University
FUJII, Yasuhiko	The University of Tokyo
FURUSAKA, Michihiro	Neutron Science Lab., IMSS
IIDA, Atsuo	Photon Factory, IMSS
IKEDA, Susumu	Neutron Science Lab., IMSS
KOBAYASHI, Masanori	Photon Factory, IMSS
KOSUGI, Nobuhiro	Okazaki National Research Institute
KUROKAWA, Shinichi	Accelerator Lab., KEK
MATSUSHITA, Tadashi*	Photon Factory, IMSS
MIKI, Kunio	Kyoto University
NAGAMINE, Kanetada	Meson Science Lab., IMSS
NISHIDA, Nobuhiko	Tokyo Institute of Technology
NOMURA, Masaharu	Photon Factory, IMSS
OHSUMI, Kazumasa	Photon Factory, IMSS
OHTA, Toshiaki	The University of Tokyo
OSHIMA, Masaharu	The University of Tokyo
SATO, Kotaro	Accelerator Lab., KEK
SHIBATA, Tokushi	Applied Research Lab., KEK
SHIMOMURA, Osamu	Japan Atomic Energy Research Institute
TSUKIHARA, Tomitake	Osaka University

* Chairman ** Vice-Chairman

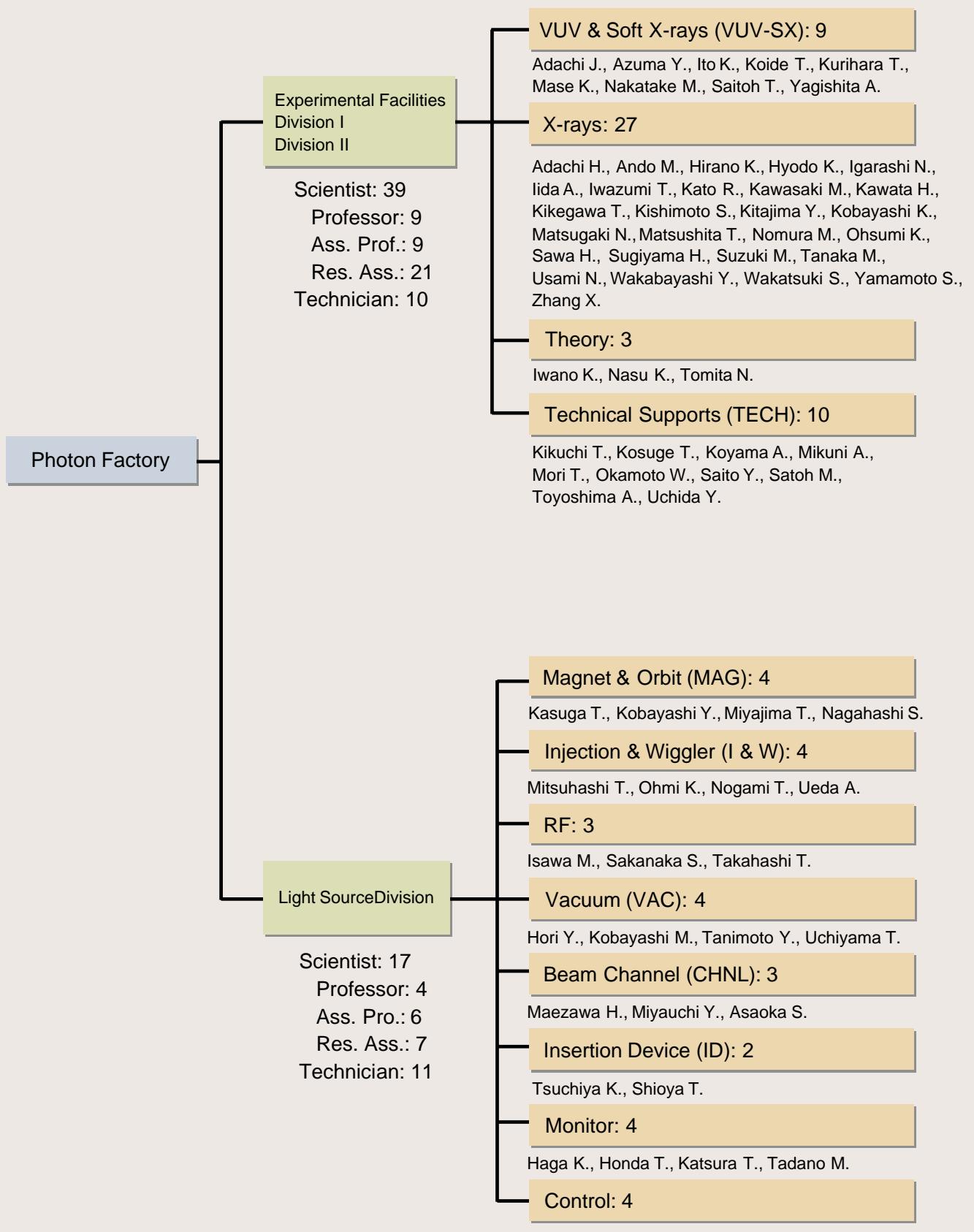


Figure 3
Organization chart of PF (as of March 31, 2002)

Table 3 Staff members of the Photon Factory

Research Staff**Director**

MATSUSHITA, Tadashi	Director	tadashi.matsushita@kek.jp
---------------------	----------	---------------------------

Experimental Facilities Division I & II

ADACHI, Hiromichi	X-rays	hiromichi.adachi@kek.jp
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NOMURA, Masaharu	X-rays	masaharu.nomura@kek.jp
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ZHANG, Xiaowei	X-rays	zhang.xiaowei@kek.jp

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PAK, Cheol On	CONTROL	cheol-on.pak@kek.jp

SAKANAKA, Shogo	RF	shogo.sakanaka@kek.jp
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TSUCHIYA, Kimichika	ID	kimichika.tsuchiya@kek.jp

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Guest Professor

ISHIDA, Katsuhiro	(RIKEN)
KATAOKA, Mikio	(NAIST)
OSHIMA, Masaharu	(The Univ. of Tokyo)
HYODO, Toshio	(The Univ. of Tokyo)
MURAKAMI, Yoichi	(Tohoku Univ.)
KITAMURA, Hideo	(SPring-8)
NAKAMURA, Satoshi	(Tohoku Univ.)
TAKAHASHI, Toshio	(The Univ. of Tokyo)
KATO, Masahiro	(IMS)

COE Staff

HIKOSAKA, Yasumasa	hikosaka@post.kek.jp	2001.Aug.1~
HUAI, Ping		~2001.Nov.1
KOBAYASHI, Eiichi	eiichik@post.kek.jp	
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TODA, Mitsuru	mtoda@post.kek.jp	2001.Dec.1~

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MIYATA, Yoshikazu	
MIZUSAWA, Atsushi	2001.Oct.1~
MORIMOTO, Osamu	
NAKAJIMA, Hideki	
OHSAWA, Hitoshi	
RAHMAN Md. Obaidur	
UCHIYAMA, Hidefumi	2001.Apr.1~
YABUKI, Ryotaro	
YAMAZAKI, Masahiro	

2. List of Workshops and Seminars

PF Symposium (Annual User Meeting)

The 19th Photon Factory Symposium

Mar. 19-20, 2002

PF Workshops

Symposium of Powder Diffraction Methods: Recent Development
in Methodology [1]

May. 10-11, 2001

Structural analysis of thin films and multiplayer films using X-ray
reflection/scattering method [2]

Dec. 21-22, 2001

Workshop on the Development of Microbeam Cell Irradiation System [3]

Mar. 7-8, 2002

Materials Science using Inelastic X-ray Scattering

Mar. 29-30, 2002

Seminars at PF

WAKITA Takanori (ISSP)

Study on interaction of silicon surface with C60 and C70

Apr. 27, 2001

NAKAMATSU Hirohide (Kyoto Univ.)

XANES spectra deduced theoretically with the L2 method

May 18, 2001

DENBEAUX G. (LBL)

The Full Field X-ray Microscopeat the Advanced Light Source Advances and
Applications with Imaging at 25nm Resolution

Jul. 16, 2001

SHENG Weifan (Chinese Academy of Sciences)

An Introduction to Beijing Synchrotron Radiation Facility

Jul. 30, 2001

SWEET R. M. (BNL)

The Approach to High-Throughput Macromolecular Crystallography: Experience
at the NSLS

Sep. 12, 2001

OSHIMA Masaharu (The Univ. of Tokyo)

Production of quantum nano-structure and new materials

Oct. 16, 2001

ANDO Masami (PF)

Recent development of X-ray imaging optics

Oct. 25, 2001

PAVLYCHEV A. A. (St. Petersberg Univ.)

Collective Properties of the Shape Resonance Feature in K-shell Photoionization
of CO₂

Nov. 22, 2001

VLADIMIR Nedresov (Inst. of Kurchatov)

Medical Research at KSRS

Dec. 8 2001

SULLIVAN James (PF)

Low Energy Physics with Positrons: Trapping Cooling and Scattering Experiments

Dec. 7, 2001

TOMISAKI Takashi (Swiss Light Source)

Fully Integrated Protein Crystallography (PX) Beamline Control System at the Swiss
Light Source –ALL YOUR DEVICE ARE BELONG TO US–

Jan. 10, 2002

WEIK Martin (IBS, Grenoble)

Radiation Damage to Proteins can be Visualized

Mar. 11, 2002

BOZEK John (LBL)

Atomic and Molecular Physics at the ALS

Mar. 19, 2002

Proceedings

[1] KEK Proceedings 2001-17 (in Japanese)

[2] KEK Proceedings 2001-25 (in Japanese)

[3] KEK Proceedings 2002-4 (in Japanese)

3. List of Publications

1B

Y.Kubozeno, T.Takabayashi, T.Kambe, S.Fujiki, S.Kashino and S.Emura
Structure and Physical Properties of Na₄C₆₀ under Ambient and High Pressures
Phys. Rev. B, **63** (2001) 045418.

K.Ohwada, Y.Fujii, N.Takesue, M.Isobe, Y.Ueda, H.Nakao, Y.Wakabayashi, Y.Murakami, K.Ito, Y.Amemiya, H.Fujihisa, K.Aoki, T.Shobu, Y.Noda and N.Ikeda
"Devil's Staircase"-Type Phase Transition in NaV₂O₅ under High Pressure
Phys. Rev. Lett., **87** (2001) 086402.

K.Ishii, A.Fujiwara, H.Suematsu and Y.Kubozeno
Ferromagnetic Transition in Europium Fullerides Eu_xSr_{6-x}C₆₀
AIP Conf. Proc., **590** (2001) 317.

K.Ishii, A.Fujiwara, H.Suematsu and Y.Kubozeno
Ferromagnetism and Giant Magnetoresistance in the Rare-Earth Fullerides Eu_{6-x}Sr_xC₆₀
Phys. Rev. B, **65** (2002) 134431.

1C

K.Ono, J.H.Oh, M.Mizuguchi M.Oshima, A.Kakizaki, T.Kikuchi, A.Yagishita and H.Kato
Performance of the High-Resolution High-Flux Monochromator for Bending Magnet Beamline BL-1C at the Photon Factory
Nucl. Instrum. Meth. Phys. Res. A, **467-468** (2001) 573.

2C

A.Kotani and S.Shin
Resonant Inelastic Scattering Spectra for Electrons in Solids
Rev. Modern Phys., **73** (2001) 203.

K.Ito
New Insights on the Shape Resonances in the K-shell Continua of the N₂ and CO Prototype Molecules
J. Elec. Spec. Relat. Phenom., **114-116** (2001) 15.

K.Ito
New Insight on the Σ Shape Resonances in the K-Shell Continua of the N₂ and CO Prototype Molecules (in Japanese)
J. Jpn. Soc. Synchrotron Rad. Res., **14** (2001) 35. (in Japanese).

3A

N.Kita, N.Shibuichi and S.Sasaki
X-Ray Magnetic Circular Dichroism in Cobalt-Iron Spins and Electronic States of Co Ions
J. Synchrotron Rad., **8** (2001) 446.

M.Kimura and A.Ikari
In situ Observation of Si(001) Surface in He Atmosphere at High Temperatures
J. Appl. Phys., **89** (2001) 2138.

M.Kimura
In situ Observation of Critical Phenomena at Surfaces of Cu₃Au(001) and Si(001) Near the Transition Temperatures by X-Ray Evanescent Wave
Transactions of the Materials Research Soc. Jpn., **26** (2001) 775.

M.Kimura
In situ Observation of Critical Phenomena at Surfaces by X-Ray Evanescent Wave
MSRI (Materials Science Research International), Special Technical Publication (2001) 394.

H.Fujimori, M.Yashima, S.Sasaki, M.Kakihana, T.Mori, M.Tanaka and M.Yoshimura
Internal Distortion in Ceria-Doped Hafnia Solid Solutions: High-Resolution X-Ray Diffraction and Raman Scattering
Phys. Rev. B, **64** (2001) 134104.

H.Fujimori, M.Yashima, S.Sasaki, M.Kakihana, T.Mori, M.Tanaka and M.Yoshimura
Cubic-Tetragonal Phase Change of Yttria-Doped Hafnia Solid Solution: High-Resolution X-Ray Diffraction and Raman Scattering
Chem. Phys. Lett., **346** (2001) 217.

M.Yashima, R.Ali, M.Tanaka, T.Mori and S.Sasaki
Study of Phase Change in Inorganic Compounds by Synchrotron X-Ray Powder Diffraction
Jpn. Mag. Mineral. Petrol., **30** (2001) 74. (in Japanese).

H.Ishibashi, T.Sakai and K.Nakahigashi
X-Ray Diffraction Study on Spinel Compound CuIr₂S₄ with Metal-Insulator Transition
J. Magn. Magn. Mater., **226** (2001) 233.

N.Shibuichi, N.Kita and S.Sasaki
High-Spin and Low-Spin States of Co Ions in the FeCo₂O₄-CoFe₂O₄ System Examined by X-Ray Magnetic Circular Dichroism
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S.Sasaki
A Great Boon to Single-Crystal X-Ray Diffraction by High-Brilliant, Continuous and Linear-Polarized Synchrotron Radiation
Jpn. Mag. Mineral. Petrol. Sci., **30** (2001) 76. (in Japanese).

M.Kimura
In situ Observation of Surface Reactions at Metal Surfaces by Synchrotron Radiation
Materials Science and Technology, Jpn., **38** (2001) 43. (in Japanese).

M.Kimura
In situ Observation by Using X-Ray (In-House and Synchrotron Radiation)
Materials Science and Technology, Jpn., **38** (2001) 201. (*in Japanese*).

K.Hayashi, Y. akahashi, E.Matsubara, S.Kishimoto, T.Mori, M.tanaka and M.Suzuki
Development of X-Ray Fluorescence Holography Method for Determination of Local Atomic Environment
The Fourth Pacific Rim International Conf. on Advanced Materials and Processing, (2001) 567.

M.Kimura and A.Ikari
In situ Obseravtion of Surafce Melting of Si(001) Surface
Adv. X-Ray Chem. Anal. Jpn., **37** (2002) 197. (*in Japanese*).

P.G.Radaelli, Y.Horibe, M.J.Gutmann, H.Ishibashi, C.H.Chen, R.M.Ibberson, Y.Koyama, Y.S.Hor, V.Kiryukhin and S.-W.Cheong
Formation of Isomorphic Ir³⁺ and Ir⁴⁺ Octamers and Spin Dimerization in the Spinel CuIr₂S₄
Nature, **416** (2002) 155.

R.Ali, M.Yashima, M.Tanaka, H.Yoshioka, T.Mori and S.Sasaki
High-Temperature Synchrotron X-Ray Powder Diffraction Study of the Orthorhombic-Tetragonal Phase Transition in Lanthanum Titanate La_{0.63}(Ti_{0.92},Nb_{0.08})O₃
J. Solid State Chem., **164** (2002) 51.

K.Hayashi
X-Ray Fluorescence Holography -Atomic Imaging of Local Environment around Impurity in Single Crystal-

Chemistry and Chemical Industry, **55-2** (2002) 113. (*in Japanese*).

S.Sasaki
Synchrotron X-Ray Study on the Charge Density and Mixed-Valence State for Transition-Metal Oxides
J. Cryst. Soc. Jpn., **44** (2002) 104. (*in Japanese*).

3B

S.Yagi, T.Nagata, M.Koide, Y.Itoh, T.Koizumi and Y.Azuma
Relative Counting Efficiencies of Ion Charge-States by Microchannel Plate
Nucl. Instrum. Meth. Phys. Res. B, **183** (2001) 476.

M.Yamazaki, K.Ozawa, K.Edamoto and S.Otani
Electronic Structure of Clean and H-Adsorbed HfC(111) Surface
J. Surf. Sci. Soc. Jpn., **22** (2001) 449. (*in Japanese*).

K.Edamoto, M.Yamazaki, T.Noda, K.Ozawa and S.Otani
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M.Sugihara, K.Ozawa, K.Edamoto and S.Otani
Photoelectron Spectroscopy Study of Mo₂C(0001)
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3C3

H.Adachi, H.Kawata and M.Ito
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Phys. Rev., **B63** (2001) 054406.

S.Kishimoto, H.Adachi and M.Ito
A Cooled Avalanche Photodiode Detector for X-Ray Magnetic Diffraction Experiments
Nucl. Instrum. Meth. Phys. Res. A, **467-468** (2001) 1171.

4A

Y.Takahashi, A.Iida, Y.Takanishi, T.Ogasawara, K.Ishikawa and H.Takezoe
Dynamic Behaviour of the Local Layer Structure of Antiferroelectric Liquid Crystals under a High Electric Field Measured by Time-Resolved Synchrotron X-Ray Microbeam Diffraction
Jpn. J. Appl. Phys., **40** (2001) 3294.

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X-Ray Double Phase Retarders to Compensate for Off-Axis Aberration
J. Synchrotron Rad., **8** (2001) 33.

K.Sato, Y.Ueji, K.Okitsu, T.Matsushita, J.Saito, T.Takayama, and Y.Amemiya
Imaging due to Magnetic Anisotropy with Hard X-Rays
J. Magn. Soc. Jpn., **25** (2001) 206.

Y.Takahashi, A.Iida and Y.Takanishi
Time-Resolved X-Ray Micro-Diffraction of the Dynamic Local Layer Response to Electric Field in Antiferroelectric Liquid Crystals
J. Jpn. Soc. Synchrotron. Rad. Res., **14** (2001) 356. (*in Japanese*).

A.Ektessabi, S.Shikine, N.Kitamura, M.Rokkum and C.Johansson
Distributions and Chemical State of Iron and Chromium Released from Orthopedic Implants into Human Tissues
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A.Ektessabi, S.Shikine and S.Yoshida
Quantitative Analysis of Biomedical Samples Using Synchrotron Radiation Microbeams
Application of Accelerators in Research and Industry, (2001) 720.

A.Ide-Ektessabi, S.Fujisawa, K.Sugimura, Y.Kitamura and A.Gotoh
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X-Ray Spectrom., **31** (2002) 7.

4B1

K.Koto, Y.Nakakita, C.Numako and K.Ohsuni
Crystallographic Study of γ -Al₂O₃ Single Crystal
Nature Science Research (The Univ. of Tokushima), **15**
(2002) 107.

4B2

T.Ida, H.Hibino and H.Toraya
Peak Profile Function for Synchrotron X-Ray
Diffractometry
J. Appl. Cryst., **34** (2001) 144.

T.Ida
Model Peak Profile Functions for Powder Diffractometry
as Convolutions with Instrumental Functions
Rigaku Denki J., **32** (2001) 24. (*in Japanese*).

N.Sakai, T.Hashimoto, T.Katsume, K.Yamaji, H.Negishi,
T.Horita, H.Yokokawa, Y.P.Xiong, M.Nakagawa and
Y.Takahashi
Miscibility Gap in CeO₂-ZrO₂-YO_{1.5} System as an
Electrode of Solid Oxide Fuel Cell
Solid State Ionics, **143** (2001) 151.

4C

H.Abe, K.Harada, R.J.Matsuo, H.Uwe and K.Ohsshima
X-Ray Diffuse Scattering Associated with Ferroelectric
Microregions in KTa_{1-x}Nb_xO₃
J. Phys.: Condens. Matter, **13** (2001) 3257.

H.Nakao, K.Magishi, Y.Wakabayashi, Y.Murakami,
K.Koyama, K.Hirota, Y.Endo and S.Kunii
Antiferro-Quadrupole Ordering of CeB₆ Studied by
Resonant X-Ray Scattering
J. Phys. Soc. Jpn., **70** (2001) 1857.

K.Ohwada, Y.Fujii, N.Takesue, M.Isobe, Y.Ueda,
H.Nakao, Y.Wakabayashi, Y.Murakami, K.Ito,
Y.Amemiya, H.Fujihisa, K.Aoki, T.Shobu, Y.Noda
and N.Ikeda
"Devil's Staircase"-Type Phase Transition in NaV₂O₅
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