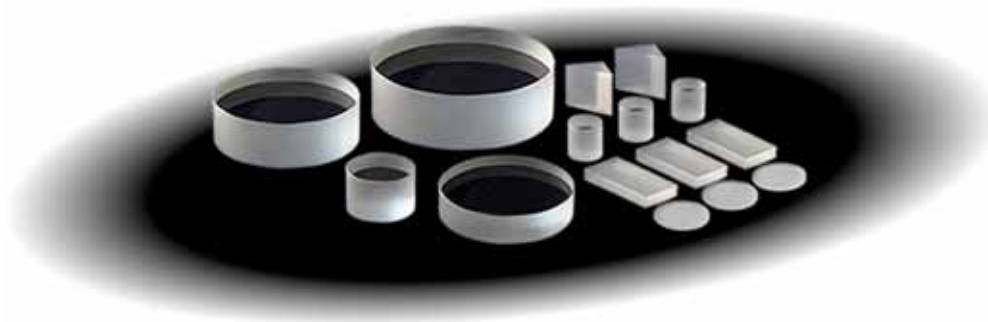


# Profile of the Corporation



LEADING OPTICAL TECHNOLOGY  
WITH THE INFINITE CHALLENGING SPIRIT AND CREATIVITY

 MITSUI MINING & SMELTING GROUP

 NIHON KESSHO KOGAKU CO., LTD.

## About Us

NK&K's optical technology supports the world's future dream come true.

We, NK&K have cultivated optical crystals and device technology with challenging spirits and creativity for a long time.



We are utilizing our technologies with our experience of "High quality CaF<sub>2</sub> crystals" and "The only one company in the world producing from scintillator to optical device"

We were certified for ISO9002 on 1995, ISO14001 on 2006 and OHSAS18001 on 2007.

Satoru Kobayashi  
President & CEO

## Sales PR

Crystals for semiconductors and TV cameras, Scintillator and detectors for medical and security, we NK&K are providing various products and several markets.

Our motto is "Small but shining in the world".

To maintain the brightness and to be presence company, quick response is what we orient to receive a high reliability from the customer.

Not only to hear the customer's needs and wants but to convey the important factors, "communication" is what have we cared.

**LEADING OPTICAL TECHNOLOGY  
WITH THE INFINITE CHALLENGING SPIRIT AND CREATIVITY**



## Products

### **CaF<sub>2</sub>** (Calcium Fluoride)



Calcium Fluoride (CaF<sub>2</sub>), with its characteristic of low distributions has a long history in imaging fields.

With its high transparency, it is used as an optical material for excimer laser, semi-conductor. In this market, high laser durability and transparency are expected.

NK&K not only produce CaF<sub>2</sub> from crystal growth to processing but makes its evaluation within the company. From IR grade to ArF Grade, NK&K supplies various grade of high quality Calcium Fluorides.

### **CdWO<sub>4</sub>** (Cadmium Tungstate)

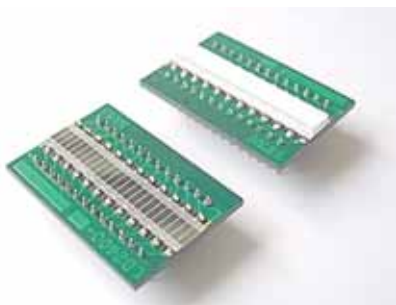
NK&K has success to produce high quality Tungsten Acid Cadmium with short afterglow.



### **Solid State X-ray Detectors.**

NK&K DEX Division is one of the largest custom solid-state X-ray detectors suppliers. The main application of these detectors is for baggage and container scanners, non-destructive testing and industrial use.

Other applications include Medical X-ray CT. Our X-ray detector consists of a scintillating crystal and photodiode, both of which are produced in our company. NK&K is the only company that produces scintillators, photodiodes and integrated detectors within one company.



This fact is really a big advantage of our company; Not only do we guarantee crystal and photodiode individually but also we test and guarantee the completed detector. Quality, delivery, cost and assembly of individual components will not bother customers anymore.

## Research & Development



Laser Durability Measurement System.

The technology of NK&K is admitted globally.

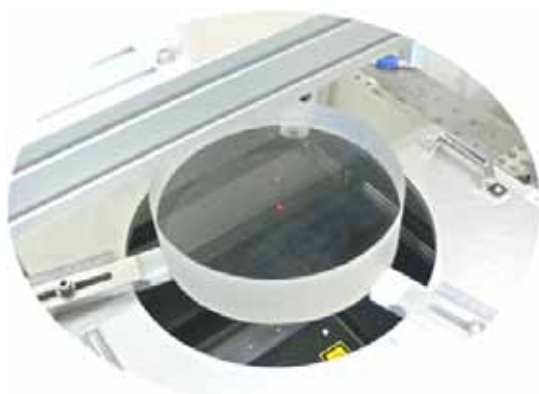
To maintain our position as a technical leading company, we are utilizing the strong backups from Mitsui Mining & Smelting.



Laser Irradiated CaF<sub>2</sub>

Specifically, We analyze and develop together with R&D and introduce material development method.

We would like to contribute our performance and experience to the society.



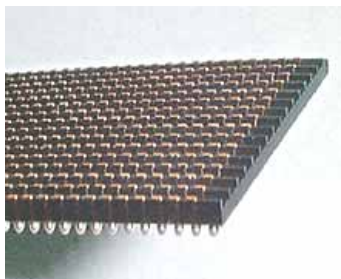
Measurement of Birefringence of CaF<sub>2</sub>

### Other Measurement Systems

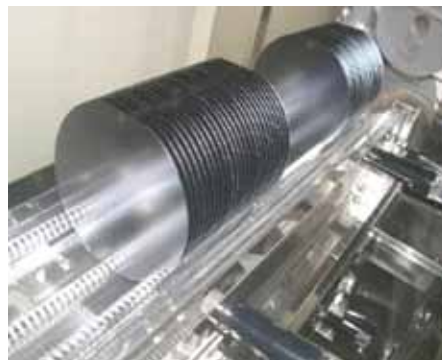
- Spectrophotometer
- Fluorometer
- Interferometer
- X-Ray Measurement System
- After Gros Measuring Device
- Resolution Measuring Instrument

### Development System

We will provide X-ray detection machine with customer's demand installed with our original semiconductor technics and up-graded packaging technology.



Especially we are developing CSP (Chip Size Package) which has low noise.



# Profile



## COMPANY DATA

<b>Company Name</b>	Nihon Kessho Kogaku Co.,Ltd.
<b>Establishment</b>	Hinata Tatebayashi-City Gunma, Japan in July 1973
<b>Capital</b>	\$ 750,000 (100% owned by MMS)
<b>Head Office</b>	810-5 Nobe-cho Tatebayashi-City Gunma, Japan TEL.0276-72-1917 FAX.0276-75-1800
<b>DEX Plant</b>	318-19 Kondo-cho Tatebayashi-City Gunma, Japan TEL.0276-75-3322 FAX.0276-75-3339
<b>Ageo Plant</b>	1031-1 Shimouehara Ageo-City Saitama, Japan TEL.048-777-7678 FAX.048-777-7679
<b>President</b>	Satoru Kobayashi
<b>Banks</b>	The Gunma Bank, Ltd. Sumitomo Mitsui Banking Corporation.


## COMPANY HISTORY

<b>July 1973</b>	NK&K was established in Hinata Tatebayashi-City Gunma, Japan. Capital : \$ 28,000
<b>April '76</b>	Relocated from Hinata to Kondo both in Tatebayashi-City Gunma, Japan. Capital increase : \$47,600
<b>April '78</b>	Capital increase : \$95,200
<b>December '85</b>	Capital increase : \$838,000
<b>April '87</b>	DEX,Inc. was established for downstream development. Capital : \$ 190,000 (60% owned by NK&K, 40% owned by MMS)
<b>June '88</b>	Advanced Crystal Technology, Inc. was established. Capital : \$ 500,000 (50% owned by NK&K, 50% owned by MMS)
<b>March '89</b>	MMS wholly owned NK&K
<b>April '91</b>	Relocation to Nobe-cho Tatebayashi-City Gunma, Japan. due to the expansion of facility.
<b>March '93</b>	NK&K merged DEX.
<b>April '93</b>	Capital increase : \$ 1,330,000
<b>June '93</b>	NK&K wholly owned A.C.T.
<b>July '93</b>	Capital increase : \$ 3,270,000
<b>December '95</b>	ISO 9002 ( ISO 9001 ) Certified.
<b>March '97</b>	Capital increase : \$ 750,000
<b>July '99</b>	NK&K sold the whole stocks of A.C.T.
<b>April '00</b>	NK&K(U.S.A),Inc. was established for overseas sales.
<b>April '02</b>	Installation of Ageo Plant.
<b>April '06</b>	ISO 14001 Certified.
<b>April '07</b>	OHSAS 18001 Certified.
<b>October '07</b>	Expansion of Ageo Plant.

## Access Map



### Contact us

 Nihon Kessho Kogaku Co.,Ltd.

TEL : 0276-72-1917

FAX : 0276-75-1800

Email : [sales@nk-k.co.jp](mailto:sales@nk-k.co.jp)

 Nihon Kessho Kogaku Co., Ltd.

810-5 Nobe-cho Tatebayashi-City Gunma, Japan 374-0047 Phone; +81-0276-72-1917 FAX; +81-0276-75-1800