

http://www.sumitomo.gr.jp/

住友化学株式会社 住友重機械工業株式会社 株式会社三井住友銀行 住友金属鉱山株式会社 住友商事株式会社

Sumitomo Corporation 三井住友信託銀行株式会社 住友生命保険相互会社 株式会社住友倉庫 住友電気工業株式会社 三井住友海上火災保険株式会社 Mitsui Sumitomo Insurance Co., Ltd. 日本板硝子株式会社

NEC 住友不動産株式会社

住友大阪セメント株式会社 三井住友建設株式会社 住友ベークライト株式会社 住友林業株式会社

三井住友カード株式会社 住友建機株式会社

住友ゴム工業株式会社 住友精化株式会社 住友精密工業株式会社 大日本住友製薬株式会社

住友電設株式会社 住友電装株式会社 株式会社日本総合研究所

三井住友ファイナンス&リース株式会社

SMBCフレンド証券株式会社

SCSK株式会社 住友理工株式会社 日新電機株式会社 株式会社明電舎

住友三井オートサービス株式会社

Sumitomo Chemical Co., Ltd. Sumitomo Heavy Industries, Ltd. Sumitomo Mitsui Banking Corporation Sumitomo Metal Mining Co., Ltd.

Sumitomo Mitsui Trust Bank, Limited Sumitomo Life Insurance Company The Sumitomo Warehouse Co., Ltd. Sumitomo Electric Industries, Ltd.

Nippon Sheet Glass Co., Ltd.

NEC Corporation

Sumitomo Realty & Development Co., Ltd. Sumitomo Osaka Cement Co., Ltd.

Sumitomo Mitsui Construction Co., Ltd.

Sumitomo Bakelite Co., Ltd. Sumitomo Forestry Co., Ltd. Sumitomo Mitsui Card Co., Ltd.

Sumitomo (S.H.I.) Construction Machinery Co., Ltd.

Sumitomo Rubber Industries, Ltd. Sumitomo Seika Chemicals Co., Ltd. Sumitomo Precision Products Co., Ltd. Sumitomo Dainippon Pharma Co., Ltd. Sumitomo Densetsu Co., Ltd.

Sumitomo Wiring Systems, Ltd. The Japan Research Institute, Limited

Sumitomo Mitsui Finance and Leasing Co., Ltd.

SMBC Friend Securities Co., Ltd.

SCSK Corporation Sumitomo Riko Co., Ltd. Nissin Electric Co., Ltd. Meidensha Corporation

Sumitomo Mitsui Auto Service Co., Ltd.



Back in operation, Onagawa Station in Miyagi Prefecture is an eloquent expression of how the region is getting back on track

営業を再開し、 復興の象徴となった 宮城県の女川駅

#### **SUMITOMO QUARTERLY** WINTER 2015/2016 no.143

Publisher: Sumitomo Group Public Affairs Committee Planning & Editing: Nikkei BP Consulting, Inc. Printing: Dai Nippon Printing Co., Ltd. Design: BOLD GRAPHIC

© 2016 Sumitomo Group Public Affairs Committee All rights reserved Printed in Japan

発行:住友グループ広報委員会 編集協力:日経BPコンサルティング 印刷:大日本印刷 デザイン:ボールドグラフィック ©住友グループ広報委員会2016 本誌記事、写真、イラストの無断転載を禁じます。







### SUMITOMO QUARTERLY WINTER 2015/2016 NO. 143

#### Contents

- 2 Our Aspirations
  Sokichi Sano
  Sumitomo Forestry
- 4 RECONSTRUCTION 2016
- 12 Tomohiro Nakamori's Insights
- 14 Illustrator Ryoko Takagi Visits Sumitomo Group Chiba Training Facilities of Sumitomo Construction Machinery
- 18 SUMITOMO'S MODERN DEVELOPMENT
- 20 News & Topics
- 23 Oh! BENTO!!

Kyozo Morioka SMBC Friend Securities

- 2 叶えたい未来がある 住友林業 佐野 惣吉
- 4 復興 2016
- 12 仲森智博の未来新聞
- 14 漫画ルポライター たかぎりょうこの住友グループ探訪 住友建機 千葉教習センター・トレーニングセンター
- 18 近代住友の歩み
- 20 ニュース & トピックス
- 23 **私のオベントウ** SMBCフレンド証券 森岡 京三



Imost five years have passed since the Great East Japan Earthquake ravaged the coastal areas of northeast Hon-

In the zone worst affected by the disaster, most of the bulky debris has been removed and much of the infrastructure sustaining everyday life is already in place. Numerous recovery and reconstruction projects varying in scale and timeframe, led by the Japanese government, companies, NPOs, and so on, have been executed or are underway. Increasingly, rather than outsiders imposing solutions of their own devising, autonomous reconstruction benefiting from local people's involvement and inputs is becoming the main stream.

The needs in the affected areas are also evolving with the passage of time. Many challenges remain but whereas the focus in the immediate aftermath of the catastrophe was on relief and recovery, the emphasis is now on creating value in each community.

Sumitomo Group is convinced that only the development of sustainable businesses can provide the foundation indispensable for regional regeneration. Accordingly, Sumitomo Group companies are involved in various activities geared to sustainability

and future prosperity, leveraging the strengths in their respective fields.

In the agricultural sector, Sumitomo Chemical is addressing the need to improve the fertility of rice fields whose topsoil was washed away by the tsunami. Sumitomo Metal Mining is very much part of the regional economy: at a plant in an area that until recently had been subject to an evacuation order owing to the Fukushima Daiichi nuclear accident, a locally recruited workforce is manufacturing environmentally friendly products. To harness the talents and energy of young people who are eager to get involved in reconstruction efforts, a Sumitomo Corporation program offers opportunities to learn and gain experience. This feature introduces the initiatives of these three companies.

東日本大震災の発生から、間もなく5年が経過しようとしている

被災地では大型がれきの撤去はおおかた済み、生活インフラも整いつ つある昨今。 国、企業、NPOなどがリードする大小数多くの復興プロジェ クトが実施され、ただ外部から「与える」「助ける」のではなく、地元の人た ちをも巻き込んだ、自律的な復興を目指す動きが見え始めている。

被災地のニーズも、この5年で変化した。 もちろん難問はまだまだ山積 している。 しかしながら、震災直後はとにかく生きるための「救援」や、取 りあえず暮らすための「復旧」に力点が置かれていたのが、現在では被災 地それぞれの「価値の創造」に向けた新しいフェーズに突入したともいえ るだろう。

- 住友グループ各社も、「継続的な事業こそが、被災地のさらなる復興 につながる」という考え方をベースに、本業の強みを大いに生かして、未来 を見据えた様々な活動を展開している。

住友化学は津波に襲われた水田の土壌改良を端緒に、日本の農業の今後へと目を向ける。住友金属鉱山は、つい最近まで原発事故の避難 指示が出されていた地域で積極的な地元雇用を行い、環境に寄与する 製品づくりを開始した。そして住友商事は、復興に関わりたいと考える若 者たちの学びと体験をサポートするプログラムを展開している。この3社 の取り組みを紹介しよう。

# 

Working Together: Communities and Enterprises Rise to the Challenge of Post-Earthquake Reconstruction

地域と企業が共に挑む、復興の今

SIIMITOMO OIIARTERI V

Post-earthquake reconstruction in action: A clear blue sky offers the prospect of good weather and a bumper catch as this new fishing boat heads out to sea for the first time.

東日本大震災後、初めて漁に出る新造 漁船を快晴の空が祝福していた。(宮 城県石巻市近海)





# **Expertise in soil diagnosis speeds** restoration of farmland

土壌診断の知見を生かして農地修復を実現



he colossal tsunami triggered by the earthquake not only destroyed homes but also devastated farmland in coastal areas. After the water subsided, farmland was left strewn with debris and rendered uncultivable by high salt content in the soil owing to the inundation with seawater. Although the bulkier debris was removed early on, fragments of metal, glass and so forth remained in the sediment covering the farmland, and the salt content of the soil was still far too high. In that woeful condition, the land was incapable of sustaining commercial agriculture. How could the farmland be restored to fertility? As well as handling fertilizers and other agricultural supplies, Sumitomo Chemical possesses expertise in farm soil diagnosis. The company was eager to apply its long-cultivated expertise in the agricultural sector to make the ravaged land in the coastal zone bloom again.

Sumitomo Chemical teamed up with Hitachi Zosen, a highly capable, technically advanced partner with experience in efficient, accurate surveying and excavation, using sophisticated GPS-equipped tractors and other equipment. In a relationship that predated the Great East Japan Earthquake, the two companies had been working together to revitalize the agricultural sector and were fully aware of their complementary capabilities. Based on this relationship of mutual trust, they moved quickly, beginning demonstration experiments in rice fields in Watari, Miyagi Prefecture, in November 2011, the year in which the earthquake occurred. Hitachi Zosen excavated the sediment covering the rice fields and removed the debris and salt from the soil. As well as conducting soil analysis and diagnosis, Sumitomo Chemical monitored the growth, yield and quality of rice cultivated on the treated farmland.

The removal of debris and salt from the soil was soon completed, whereas it would have taken far longer if done by manual labor. But this alone was not enough to get the farmland back in cultivation. Vital nutrients had been washed away by the tsunami, without which yields would likely be no more than half the pretsunami level. Sumitomo Chemical analyzed soil components to identify the missing nutrients, and formulated fertilizer application plans. Accurate diagnosis and adequate replenishment of

nutrients were keys to the rapid restoration of soil fertility.

Rice seedlings were planted in May 2012. Subsequent monitoring and adjustments covered soil conditions and crop maintenance, including application of fertilizers. By autumn 2012, the paddies had regained their golden shimmer as the grain ripened. Crop yields were already 80% of those of a typical year, which was an excellent result considering that the work to restore farmland had been performed in such a short time.

In this project, Sumitomo Chemical's strengths were fully utilized in line with the company's pursuit of comprehensive and continuous support for agriculture, not just the sale of fertilizers. The project's outcome promises to benefit farming not only in the disaster-affected areas but also throughout Japan.



1/Rice ready for harvest in fall 2012 thanks to restoration of farmland. 2/After the tsunami, the land was uncultivable because of high salt content from the seawater. 3/Monitoring rice yields.

- 1/農地修復の結果、2012年秋に実りを取り戻した水田。
- 2/津波による海水の影響で植物生育が困難だった被災後の様子。
- 3/イネの収量調査の様子(写真はイメージ)。

巨大津波は、人々が暮らす家屋だけでなく、沿岸部の農地をも容赦なく襲った。水が引いた後、これらの農地で課題となったのは、津波が運んできた大量のがれきと海水の塩分だ。大きながれきは早い段階で取り除かれたが、農地を覆う堆積物の中には金属片やガラスといった細かながれきが残っており、土壌の塩分濃度も高いまま。これでは作物を育てることはできない。この農地を再生する力になれないか――。肥料や農業資材を扱い、農地の土壌診断を手がけてきた住友化学は、長年培ってきた知見を被災地の農業復興に生かそうと考えた。

パートナーとなったのは日立造船。同社はGPS搭載トラクターなどを使って高精度の測量と掘削を効率的に行う技術を有している。両社は東日本大震災以前から、地域農業の活性化に協力して取り組み、互いの強みを熟知していた。この信頼関係を基に、早くも震災当年の11月から宮城県直理町の水田で実証実験を開始。日立造船が水田を覆う堆積物を掘削し、土中のがれきや塩分を除去。住友化学が土壌の分析と診断、イネの生育調査を手がけた。

手作業では何倍もの時間がかかるがれきと塩分の除去作業は短期間で終了したが、これで農地を再生したことにはならない。作物の生育に必要な土壌の栄養分が流されてしまっていたからだ。そのまま作付けしたのでは、バラつきもあるが、被災前の半分程度の収穫量しか望めない。そこで土壌を化学的に分析し、残存する栄養分と欠乏する成分を把握。どんな肥料をどれだけどのように施せばいいのか、施肥計画を検討した。適切な診断と養分補給が加わることで、土壌は飛躍的に再生していく。

2012年5月には田植えを実施。その後も土壌や作物の生育状況を 調べ、必要に応じて肥料を追加するなど継続的な調査が行われた。そしてその秋、水田は黄金色の輝きを取り戻した。収穫量は例年の80%だったが、短期間での農地再生の結果としては十分な成果だ。

肥料を販売するのみではない総合的・継続的な営農支援を追求して きた住友化学の強みがまさに生かされた。この経験は被災地にとどまら ず、今後の日本の農業振興にも着実につながっていくだろう。





1/Sumiko Energy Materials Naraha Plant in Fukushima Prefecture. 2/Lithium nickel oxide manufactured by the new plant. 3/The rechargeable battery in which lithium nickel oxide is used.

- 1/福島県に誕生した住鉱エナジーマテリアル楢葉工場。
- 2/同工場で製造されたニッケル酸リチウム。
- 3/同部材を使用した二次電池。

# New plant spurs reconstruction efforts in Fukushima

復興のため新たな生産拠点を福島に

he Great East Japan Earthquake struck on March 11, 2011, not long after Nihon Kagaku Sangyo Co., Ltd. had held a ceremony marking completion of the construction of its Fukushima No.2 Plant at Naraha-machi, Futabagun, Fukushima Prefecture.

Sumitomo Metal Mining (SMM) wanted to increase production of lithium nickel oxide, a cathode active material used in rechargeable batteries, to meet rising demand. Lithium nickel oxide is a key material of the lithium-ion rechargeable batteries that power electric vehicles. SMM had been producing lithium nickel oxide at its Isoura Plant in Ehime Prefecture but the site was too small to accommodate the expansion plans. The vacant new Fukushima No.2 Plant caught SMM's eye.

Not only would an additional production base enable SMM to disperse the supply risk, but its use of the new plant would also spur regeneration of Naraha-machi and the Fukushima Hamadoori area that had been affected by the Fukushima Daiichi nuclear accident. SMM established wholly owned subsidiary Sumiko Energy Materials to lease the Fukushima No. 2 Plant and ready it for mass production. The new company's workforce was mostly recruited locally. SMM's decision to open a plant in

2011年3月。福島県双葉郡楢葉町で、日本化学産業・福島第二 工場の竣工式が行われて間もなく、東日本大震災がこの地を襲った。

住友金属鉱山は、増加する二次電池用正極活物質のニッケル酸リチウム需要に対応するため、増産計画を立てていた。ニッケル酸リチウムは、電気自動車に搭載する二次電池のコアを成す重要な部材。愛媛県の磯浦工場で生産していたが、敷地の面で設備増強に限界があると感じていたところだった。そのタイミングで同社は、完成はしたものの空き工場となっていた福島第二工場の話を聞いた。

生産拠点を複数にすることで、増産対応に加え供給リスクの分散が図れるメリットもある。それは同時に、楢葉町をはじめとする原発事故の影響を受けた福島・浜通り地域の復興にもつながる……。同社は従業員の多くを現地雇用する100%子会社「住鉱エナジーマテリアル」を設立し、福島第二工場を借用した生産拠点の確立へと歩を進めた。楢葉町に進出する住友金属鉱山の思いは、被災地復興と本業の躍進を結びつけるものとして、必然的な経営判断だったといえる。

現地は福島第一原発から近く、避難指示区域に指定されていたが、放射線量が低い同町は2015年9月に避難指示が解除された。同社は以前から避難指示の解除を念頭に、12月の稼働開始を目指して準備に入っていた。ただ、問題は大きかった。原発事故以来、誰も居住してい





- 4/Meticulous quality & safety management 5/Employees working at the new plant.
- 4/品質はもちろん安全管理も徹底されている。
- 5/同工場で働く従業員のみなさん。

Naraha-machi was a deft move linking business development with regeneration of the stricken area.

Naraha-machi is near the Fukushima Dai-ichi Nuclear Power Station. It was designated an evacuation zone but the order was cancelled in September 2015 in view of the low radiation level. Anticipating this, SMM had been preparing to bring the new plant on stream in December 2015. However, SMM encountered many problems. No one had been to Naraha-machi since the accident at the nuclear plant. There were no shops selling food and public transport services were suspended. At first, it was difficult even to get bento lunches for the employees. But once the Japanese government decided to open an off-site center, which is a key facility in the event of a nuclear disaster, and a mock-up facility for research on decommissioning reactors, the situation changed. The infrastructure necessary for daily life is being deployed. SMM's expertise in developing mines at overseas sites lacking infrastructure is proving very useful.

Everyone working at the new plant is delighted to be spurring the regeneration of Naraha-machi through the manufacture of environmentally friendly products. SMM's vision of contributing to the local community, not least by making it possible for people to live their lives free of anxiety, is rapidly becoming reality as the plant prepares for the start of full-scale operations.

なかった同町には、食料を提供してくれる店も、公共交通機関もない。当初は従業員の昼の弁当を手配するのも一苦労だった。しかし、原子力災害時の対応拠点となるオフサイトセンターや、廃炉作業の研究開発拠点となる「モックアップ施設」など国の施設の進出が決まり、状況が好転。現在、生活インフラ自体は整いつつあるという。最初は何もなく途方に暮れたというが、そんなとき、海外のインフラの整っていない地域で鉱山開発を行ってきたノウハウが生きた。

働く人たちは「環境に寄与する製品づくりを通じてこの町を復興する」という誇りと気概を持ち、取り組んでいる。新生産拠点を軌道に乗せ、継続的に運営することで、地域社会へ貢献したい。みんなが安心して暮らせる一助になりたいという、住友金属鉱山の思いは加速している。



Photos courtesy of Sumitomo Metal Mining and Panasonic (photo 3) 資料提供:住友金属鉱山株式会社 パナノニック株式会社 (写真3)

# Supporting young people's aspirations for the future of disaster-affected communities

若者たちのチャレンジを地域社会の未来につなげる











here must be something I can do to help the community in this unprecedented disaster" was a sentiment frequently expressed in the aftermath of the Great East Japan Earthquake of March 11, 2011. In the summer of that year Sumitomo Corporation became aware that many young people, ranging in age from teenagers to those in their early twenties, were eager to get involved in initiatives to help the areas devastated by the disaster but found it difficult to do so because of lack of connections and support.

Sumitomo Corporation provided donations and emergency relief goods to assist the stricken areas immediately after the earthquake and also supported the voluntary activities of its employees from August to November 2011. Meanwhile, Sumitomo Corporation, seeking other ways to help, considered how best to harness the aspirations of young people who were moved by the plight of the affected communities and keen to lend a hand.

Sumitomo Corporation's social contribution activities are threefold: developing the next generation of human resources, contributing to local communities in areas where we do business all over the world, and acting as a good corporate citizen. The Youth Challenge Program for the Revitalization of East Japan launched in 2012 embodies these elements.

In this program, Sumitomo Corporation, working with the Civil Society Initiative Fund, an NPO, supports young people in their efforts to revitalize the afflicted areas and help survivors rebuild their lives. Sumitomo Corporation is providing funding of up to 100 million yen a year for the five years from fiscal 2012. The Youth Challenge Program consists of two parts: the Activity and Research Subsidy and the Internship Encourage-

In fiscal 2015 the program subsidized 51 groups, more than ever before. Young people are learning from one another through presentations and group discussion. 2015年度は過去最多51団体に助成が行われた。イベントでは発表やグループディスカッションを通じて、若者たちはお互いに学び合う。

「自分が生活している身近な地域で未曾有の大災害が起きた。自分にも何かできることはないか」――。10代、20代の多くが、被災地復興支援に関わりたいという思いを抱きつつも、後押しがなく参加できていない現状を、住友商事は知った。2011年夏のことだ。

震災発生直後、同社ではまず義援金・救援物資の提供など会社としての支援を実施。8~11月には社員ボランティアの活動支援も行った。その過程で、さらにできることはないかと模索していたところ、浮かび上がってきたのが、冒頭の若者たちの思いだ。

住友商事には、社会貢献活動に関する3つの軸がある。 「次世代人材の育成支援」「事業活動の場である内外地域社会への貢献」「良き企業市民としての活動」がそれだ。 2012年に始動した「東日本再生ユースチャレンジ・プログラム」 は、まさにその理念に合致した。

同プログラムは、NPO法人・市民社会創造ファンドの協力を得て、2012年度からの5年間にわたり年間1億円をめど

ment Program. The Activity and Research Subsidy supports activities and research conducted by voluntary youth teams, clubs and groups or activities and research conducted independently by young people belonging to organizations such as NPOs and universities. Meanwhile, the Internship Encouragement Program supports long-term youth internships at NPOs and other organizations that carry out activities in disaster-affected areas. By supporting the aspirations of young people, the program aims to foster individuals who can function effectively in the afflicted areas, helping local residents reconstruct communities and achieve sustainable development.

This extensive collaboration with an NPO is a first for Sumitomo Corporation. In addition to this tie-up, Sumitomo Corporation's expertise in facilitating fruitful connections among diverse people, cultivated as an integrated trading company, has been brought into full play in this program involving numerous students and groups.

The program also holds events throughout the year for students to which experts are invited. Through presentations on their activities and discussion, the participants are stimulated and inspired, resulting in activities that become more effective with the passage of time.

The young people involved derive great satisfaction from this challenging program and members of the communities in the stricken areas highly appreciate what the young people are doing and the beneficial impact of their activities. Cultivating connections among people is helping these communities find their feet and look toward the future with renewed hope.

Activities range from those focused on the needs of children and the elderly to supporting revitalization of the local economy. Working with residents is also a valuable learning opportunity for the young people.

活動は、子どもや高齢者の支援から産業復興支援などまで多岐にわたる。地域住民との交流の中で、若者たちが学ぶことも多い。

にユース世代の復興支援活動に助成するもの。サークルや NPO、大学組織などを通じたユースの主体的な取り組みを応援する「活動・研究助成」と、学生がNPOでインターン活動を 行うための奨励金や諸経費を支給する「インターンシップ奨励 プログラム」の2事業で構成されている。 若者たちのチャレン ジをバックアップすることで、被災地で活躍する人材を育成し、地域の再建と持続的成長につなげていきたい考えだ。

同社にとってNPOとの本格的な協働は初の事例。このタッグに加え、数多くの学生や団体が関わる同プログラムにおいて、総合商社ならではの人と人をつなぐノウハウが大いに生かされた。

1年を通じて専門家を交え、学生たちが集うイベントも開催している。 お互いの取り組みを発表し合い、意見交換する中で 切磋琢磨し、活動自体もより良いものへと発展していく。

若者たちのプログラムへの満足度は極めて高い。被災地の住民も、若者たちに感謝している。醸成されていく人と人とのつながりから、地域社会の新しい未来が開けていく。



Ryoko Takagi // isits **Sumitomo Group** 

たかぎりょうこの住友グループ探訪

**Destination** [今回の訪問先]

**Chiba Training Facilities of Sumitomo Construction Machinery** 

住友建機/千葉教習センター・トレーニングセンター

Do you aspire to become a qualified construction machinery operator? Are you already qualified but want to perfect your skills? If so, you should head to these training facilities in Chiba City, Chiba Prefecture.

千葉県千葉市に位置し

一般からプロフェッショナルまでを対象にした建設機械の教習施設。

A wide range of training programs. 教習センターでは日々いろいろな教習が行われている。 SUMITOMO Ground leveling, moving heavy equipment around a site, loading, using earth-moving equipment such bulldozers, motor graders, excavators, and other machinery...skills training available here! ブルドーザー、モーターグレーダー、油圧ショベルなどを使って、整地・運搬・ 積み込み・掘削用機械の訓練を行う。

operators. I didn't know such schools existed. My heart pounded with excitement as I entered this new world inhabited by big I walked on and encountered a line of excavators delving

aise the boom!" Yes! I looked up following the instruction

my eyes. I was at the training facilities for construction machinery

and saw the boom of the excavator soaring up before

deeply into the earth. "Powerful! So this is where they learn how to manipulate these monsters so deftly!"

"Keep the height!" The voice came from off to the side. I turned and saw a huge crane with a drum-shaped weight suspended from its boom. It was explained to me that the trainee was learning how to move a load horizontally without colliding with obstacles. To complicate matters, a brisk breeze was blowing. The operation clearly required a sure yet delicate touch, with precision of just a few centimeters. Breathtaking!

Think about construction machines and the image that comes to mind is of the bold, powerful movements of large bodies. But a closer look at these machines in action reveals a very different world: a ballet of extraordinarily dexterous, precise, elegant movement. How could these big brutes of machines perform this exquisite ballet? I came to realize that the operators' minute operations achieve this choreography. It takes great skill to manipulate a bulky machine with precision of the order of a couple of centimeters. And this is the place to acquire such skill. The instructor emphasizes. "Safety comes first, Skills are all for the sake of ensuring safety." I believe the instructor's words captured the essence of the attitude required when using a machine whose bulk and sheer power dwarfs that of the human operator.

Though to the eyes of a child, excavators may look like giraffes or elephants, for me they are always reminiscent of swans. These machines, though at first sight they appear so clumsy, have an elegance all their own as they delicately extend their slender booms,

「もっと、首を上げて一!」。は、はい! 思わずその声に従って頭を上げる と、上がっていたのはショベルカーの首だった。そう、ここは一般向けの「建 設機械(以下:建機)の運転教習センター」だったのだ! 建機にも教習 センターがあるなんて! 全く知らない世界への入り口に胸が高鳴る。

敷地内をさらに進み、思わず出た言葉は「うわ、本当に土掘ってるよ~」。 何台ものショベルカーが並んで目の前の土を掘削しているのである。そうか これが教習センターの風景か!

「高さをキープして!」。今度は横から声が。振り返ると、巨大なクレーン車 が、なにやらドラム缶状の重りをぶら下げている。聞くと、障害物にぶつから ないようにドラム缶状の重りを水平に移動させる教習とのこと。風も吹く天 候の中、数cm単位の繊細な作業が続き、見ているほうも思わず息をのんで

そうか! 大きな躯体で、強くて大胆な動きのイメージが強い建機だけれ ど、実際の作業は見れば見るほど実に細やかなのだ。どうしてそんなことが できるのだろうとよくよく作業を見ていると、やはり最後はそれが人の手の微 妙な操作によるものだからと分かる。ほんの数cmの差をぴたりと合わせる のは、やはり技能なのである。ここはそのための教習センターなのだ。教官 は言う。「まずは安全。そのための技能なのです」。人が自分の力以上 の建機を操るときの注意の神髄がその言葉に込められている気がした。

小さい子どもはキリンや象に例えることが多いショベルカーだけれど、私に



All clear! Go ahead!

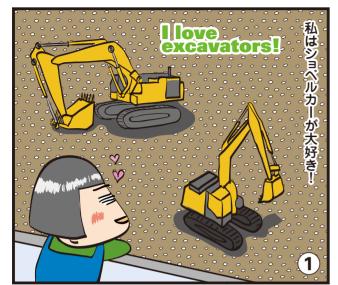


Working as a team, these three trainees master the art of using a sling to move an object. They secure the hook of the crane to a cable while confirming safety at every step of the procedure.

玉掛け技能講習。3人1組になって安全を確認しながら合図をし、クレー ンから伸びたフックをワイヤに掛ける。

# **Excavators = Swans?**

ショベルカーは白鳥?









\*The Dying Swan is a classical ballet. ※「瀕死の白鳥」は、クラシックバレエの演目です

like the necks of swans, as they delve in the earth. They attract me most at night. When people go to bed, excavators also take a rest. After a day's hard work, they look as if they are sleeping, with their booms curled up. When I see several excavators doing this, I can't help feeling an upwelling of affection toward them. "Have a good

At the training facilities, construction machinery operators who are already qualified perfect their skills and sales & marketing professionals learn everything from the basic technology to the latest developments in operation and maintenance through use of the actual machines, in addition to having classroom-style lectures. Regular training and keeping up with the fast-evolving technology are essential if you are to operate a machine as if it

はどうも昔から「白鳥」に見えてならなかった。 普段働いているショベルカー は優雅とは違うけれど、強く繊細に首を動かしている。でも私が惹かれるの は夜中だ。みんなが寝静まる頃、ショベルカーも休んでいる。日中に大きく 動かした首を縮めて。まるで眠るように。何台ものショベルカーがそうして いるのを見たとき、ゆっくり休んでね……と、なんだか愛おしくなる。

教習センターの見学を終えて訪れたのがトレーニングセンター。トレーニ ングセンターというのは、実際にプロとして建機を操作している人たちや、建 機を販売する人たちが、座学だけでなく、目の前で実際に建機そのものに触 れて、動かしたり整備したりして基礎技術から最新の技術までを学ぶ場所な のだそうだ。やっぱり人馬一体ならぬ人車一体になるには、日々の訓練と新 しい知識が大切なんだなぁ。

初めてトレーニングセンターに入ったとき、私は建機の大きさやその動きに 感激するばかりで、ましてその建機の運転席に入らせてもらったときには、も

Trainees listen attentively as the trainer explains how the machine works. Everyone is encouraged to ask questions and learn as much as possible. トレーニングセンターでの講習参加者たちの様子。実 機に触り、みんな熱心に耳を傾ける。受講者同士が立 場を超えて意見交換し新たな発見が生まれる。 Using an asphalt finisher, these trainees learn how to adjust the width of the screed (the boom at the front of the machine used to level off the surface of the asphalt) to that of the road spreading the pseudo asphalt and smoothing アスファルトフィニッシャーを動かして講習。 道幅に合 わせて実機の幅も調整し、疑似アスファルトを敷き詰 め、ならす工程を目の前で見ることができる。

were a part of you.

I'd like to

have one of these.

この手作りの教材が

ほしいです!

When I first entered the training facilities, I was so impressed by the scale and movement of these powerful machines. My excitement mounted when I was invited to take the driving seat.

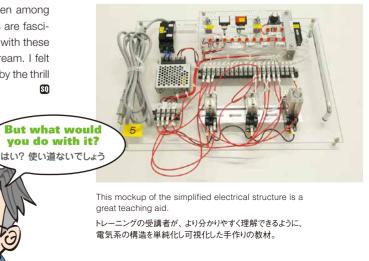
Listening to the instructors, I had a strong feeling that they are filled with affection for the construction machinery. When they explain a function, I feel the manufacturer's love for these superb machines, and their profound consideration toward the operators and concern for their safety and comfort. These emotions are embodied in the construction machines. From the development and design phase through to the manufacturing phase, everyone pours their affection, as well as their expertise, into these machines. Monozukuri is a set of values and a vocation!

I asked the people receiving the training for their views. A veteran operator told me, "Even a seemingly small thing that you would hardly notice may turn out be very important. There are things you can only learn here. It's a great opportunity to get hands-on training." The programs are very popular even among highly skilled people. Everyone looks so cheerful. Kids are fascinated by big machines and envious of those who work with these powerful contraptions. Here, as adults, they live the dream. I felt somewhat envious myself but my heart was gladdened by the thrill of it all.

う興奮しすぎて変顔になってしまうほどだった。

けれど、その後指導される方のお話を聞いていく中でひしひしと感じたの は、ここで働く人たちは本当に人と建機への愛情に溢れているんだなぁ、と いうことだ。ひとつの機能を説明するにも、作り手の建機への愛情、そして 運転する人がより安全に快適に過ごせるようにという配慮が説明のはしば しに感じられる。もちろんそれは、建機自体の作りにも表れている。これは 開発設計の段階から、製造の段階も含めてみんなが愛情を注いでいるのだ ろうな、と私自身も自分がメーカーにいた頃を思い出した。やっぱりものづく りは最高だ~!

実際にトレーニングセンターで受講されている方の話を聞いてみると、「普 段何気なくやっていることでも、とても重要なことである場合があり、ここでし か分からないことが学べて実践できるのはいい機会です」とベテランのみな さんにも好評な様子がうかがえた。その表情がとても輝いていたのは、きっ と動く機械が大好きな男の子の夢の原点が、そのままここにはあるから。な んとも羨ましく、そして温かい時間だった。



# SUMITOMO'S MODERN DEVELOPMENT

近代住友の歩み Part 6

From Business Diversification to a Limited Partnership 事業多角化から合資会社へ

### Sumitomo's Forestry Business Accomplishes a 100-Year Plan 百年の計を成す住友の林業

## Teigo Iba Succeeds in Planting a Million Trees

The Besshi Copper Mines, which opened in 1691, faced a crisis in the closing years of the 19th century owing to degradation of the surrounding mountains' forest cover, the price of development spanning two centuries. Logging to obtain construction materials for mine facilities as well as wood fuel and charcoal, coupled with sulfur dioxide gas pollution emitted from a smelter, had caused unchecked devastation of the adjacent forest.

Teigo Iba, who was appointed manager of the Besshi Copper Mines in 1894 and subsequently became the second Director General of Sumitomo, tackled this difficult problem head on. Iba declared, "Leaving the Besshi mountains a barren wasteland would violate the moral principle governing the universe. We must restore the mountains to their original verdant state and return them to nature." He engaged the services of a technical expert, formulated a large-scale reforestation plan, and launched a reforestation project.

However, since the soil of the ravaged land had suffered erosion, many seedlings failed to take root. To find out which tree species were best suited to the land, various species such as cedar, Japanese cypress, larch, black pine, and white birch were introduced, and the company patiently repeated tree-planting attempts. The cumulative number of trees planted

increased rapidly to more than 100,000 in 1894 from 30,000 the previous year, then rose sharply to more than 1.2 million in 1897. Iba established the Forestry Department in 1898, putting in place the organizational structure for a forestry business

In an era long before the concepts of environmental protection and forestation were articulated, Teigo Iba's largescale reforestation plan was a farsighted, pioneering initiative.

## A Calamity Triggers Expansion of the Forestry Business

Masaya Suzuki, who succeeded Iba as manager of the Besshi Copper Mines in 1899, also emphasized the forestry busi-

For Suzuki, the impetus was a calamity caused by a powerful summer storm that struck the Besshi area six months after his appointment. Heavy

rainfall caused a landslide that smashed mine facilities like a raging torrent, claiming the lives of 513 workers and family members.

Suzuki, who attributed the terrible disaster to overcutting of the forest, said, "Since mining is work that damages the land, which is the nation's heritage, we must engage in work that protects the land. The forestry business is an ideal way of atoning for the damage." The desire to do something of value in return for the many monetary donations and relief supplies that arrived from all over Japan after the disaster also motivated Suzuki to forge ahead with a large-scale reforestation plan. Suzuki himself directed tree-planting activities on the mountain slopes. The cumulative number of trees planted exceeded 2.2 million in 1901.

After becoming the third Director General of Sumitomo in 1904, Suzuki established the Forestry Department within the Sumitomo General Head Office (which became the "Ringyo-sho" two years later). The company launched forestry businesses in Hokkaido in the north of Japan and Miyazaki Prefecture in the south. Sumitomo Forestry continues these businesses today.

A century later, the Besshi mountains have completely returned to a verdant natural state. While environmental problems are now recognized as an issue worldwide, our predecessors at Sumitomo pioneered forestation more than a century ago. The results of a massive hundred-year project to restore a devastated mountain forest to robust health and achieve symbiosis with nature can be seen today in the majestic splendor of the Besshi mountains.

#### 伊庭が成し得た100万本の大植林

1691年に開かれた別子銅山では、約200年に及ぶ開発の代償として、19世紀終わりには山林が荒廃の危機を迎えていた。鉱山施設の建材や燃料の薪炭にするために山林の伐採は進み、製錬所から排出される亜硫酸ガスの煙害も重なって、山は荒れる一方だった。

この難題に真正面から取り組んだのが、1894年に別子鉱山支配人に就任し、後に二代目総理事となる伊庭貞剛 (いばていごう) だ。伊庭は「別子の山を荒蕪 (こうぶ) するにまかしておくことは、天地の大道に背く」「濫伐のあとを償い、別子全山を旧(もと) のあをあをとした姿にして、これを大自然にかえさねばならない」とし、専門技術者を招いて大造林計画を策定。

#### 植林事業を遂行する。

しかし、一度荒れてしまった土地はやせ細り、苗はなかなか根づかない。どの樹種が適するのか見当がつかなかったため、スギやヒノキ、カラマツ、クロマツ、シラカバなど様々な木を持ち込み、辛抱強く植林を繰り返した。前年約3万本だった植林本数は、1894年に10万本以上に急増。さらに1897年には一気に120万本を超えた。また、伊庭は1898年に山林課を設け、事業の体制も整備した。

まだ「環境対策」や「緑化」という概念もなかった時代、伊庭の大造林計画は時代に先駆けた取り組みだった。

#### 大災害をきっかけに山林事業を拡大

1899年、伊庭の後を継いで支配人に就任した鈴木馬左也 (すずきまさや)も植林事業に力を入れた。

きっかけは、就任から半年が過ぎた夏、別子を襲った暴風雨による大災害だった。 大雨が 山肌を激流のように流れ下り、山津波となって 鉱山施設を破壊。 山で働く人やその家族ら 513人の尊い命が奪われた。

大災害の原因が山林の濫伐にあると捉えた 鈴木は、「鉱山は国土を損する仕事故、国土を 護ってゆく仕事をする必要がある。云ひ換ふれ ば、罪滅ばしの為に……、それに山林事業が最 も適当」と語った。また、被災後に全国から義 援金や支援物資が多く届けられた背景もあり、 その気持ちに報いるためにも、大造林計画を推 し進めたという。鈴木は自ら現場に立ち、植林 を指揮。1901年には植林本数が220万本 を超えるに至った。

鈴木は1904年に三代目総理事に就任した 後、別子以外にも山林事業を広げていくため、 1919年に住友総本店に林業課(2年後に林 業所)を設置した。北は北海道から南は宮崎 県で事業を起こし、植林を行っていったが、これ が現在の住友林業へと続いている。

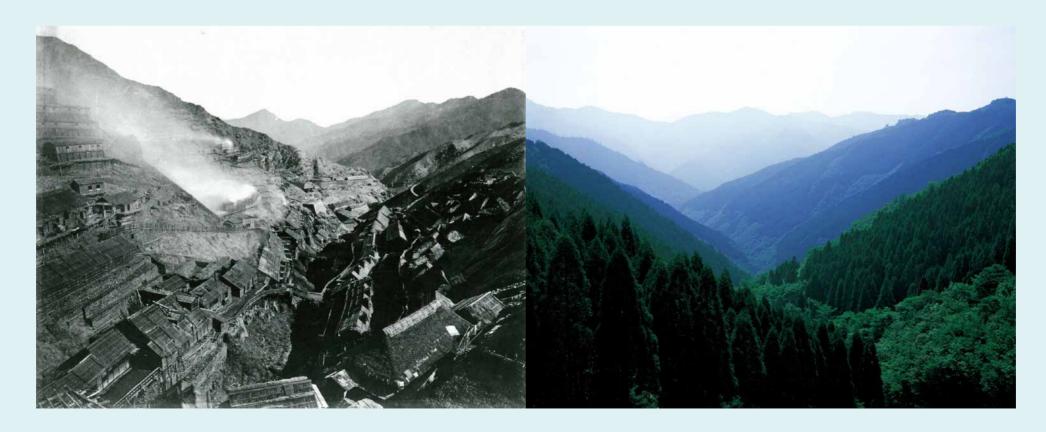
100年後の現在、別子の山は緑豊かな自然を見事に取り戻している。今や、環境問題は全世界で共通の課題となっているが、住友の先人たちは100年以上前から緑化に取り組んでいた。荒廃した山林の再生や自然との共生を、「国家百年の事業」として成し遂げた結果がここにある。

### The Besshi Copper Mines in 1881 (left) and the site today (right)

"Sumitomo's forestry business should be a hundredyear project, and I want the flourishing mountain forests to be the expression of all that Sumitomo cherishes." (Masaya Suzuki)

#### 1881年(左)と現在(右)の別子銅山の様子

「住友の林業は百年の計をなさんとするもので、私は 山林を住友最後の城郭と致したい」(鈴木馬左也)



\*Owned by Sumitomo Forestry ※住友林業株式会社所蔵 19

# News & Topics

ニュース&トピックス

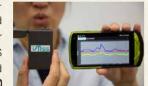
#### Sumitomo Seika Chemicals 住友精化

#### MSS Alliance Launched to Establish De Facto Standard for Odor-Sensing Systems

Established in September 2015, MSS Alliance, led by the National Institute for Materials Science (NIMS) and jointly operated by Kyocera, Osaka University, NEC, NanoWorld AG, and Sumitomo Seika Chemicals, has started full-scale activities. MSS Alliance aims to establish a de facto standard for odor-sensing systems employing an ultra-small sensor element called the Membrane-type Surface stress Sensor (MSS) capable of measuring the diverse molecules that cause odors.

NIMS is responsible for establishing design guidelines and developing materials and a cladding method, Sumitomo Seika Chemicals for supply of reference gas and construction of a database for measurement of reference gas, Osaka University for an analytical model, NEC

for big data analysis, Kyocera for development of a measurement system, and NanoWorld AG for optimization of sensor chips according to applications. MSS Alliance will accelerate practical use and popularization of the MSS technology.



#### 嗅覚センサーの業界標準化を目指す 「MSSアライアンス」が発足

物質・材料研究機構を中心に、京セラ、大 阪大学、NEC、NanoWorld AG、および住 友精化の計6機関が共同で組織する「MSS アライアンス が2015年9月に発足、本格 的な活動を開始した。MSSアライアンスは、 ニオイのもととなる多様な分子を測定できる超 小型センサー素子 「MSS (膜型表面応力セ ンサー)」を用いた嗅覚センサーシステムの業 界標準化を目指すもの。

主な役割としては、物質・材料研究機構が 設計指針の策定や材料開発・被覆方法、住 友精化が標準ガスの供給および標準ガス計 測データベースの構築、大阪大学が解析モデ ル、NECがビッグデータ解析、京セラが測定 システム開発、NanoWorld AGがセンサチッ プの用途別最適化を担い、MSS技術の社 会普及・実用化を加速させていく。

#### Sumitomo Mitsui Finance and Leasing 三井住友ファイナンス&リース

#### Agreement on Rental Services for Wearable Robot Reducing the Burden on the Lower Back

Sumitomo Mitsui Finance and Leasing and its consolidated subsidiary SMFL Rental have concluded an agreement with Activelink, a subsidiary of Panasonic, to offer rental services for the Assist Suit AWN-03 developed by

Activelink.



When the wearer lifts a heavy object up or down, this wearable robot detects the movement of the body core and drives a motor in coordination with his or her movement, thereby reducing the burden on the lower back. To promote utilization of the AWN-03 at diverse workplaces, SMFL Rental will offer rental services allowing flexible setting of a rental period corresponding to the usage needs and including maintenance services.

有型ロボッの負担を

# News & Topics

#### Nissin Flectric 日新電機

#### **New Company Established** to Facilitate Employment of the Disabled

Nissin Electric established new company Nissin Heartful Friend in September 2015 to facilitate employment of the disabled. Located within the site of Nissin Electric's head office in Ukvo-ku. Kvoto. the new company is scheduled to start operation in January 2016. The company will enable people with intellectual or physical disabilities to work effectively on their own initiative.

To this end, the company endeavors to offer worthwhile working experience and to support the disabled in their efforts to become socially independent by securing jobs for them and developing their skills. Beginning with electronic document filing services, the new company plans to expand the scope of business step by step. Following the start of operations, taking into consideration the working environment suitable for the disabled, the company intends to file an application for approval of a special purpose subsidiary based on the Act on Employment Promotion 80 etc. of Persons with Disabilities.

会社を設立

がい者雇用の促進に向け

#### Sumitomo Group Public Affairs Committee 住友グループ広報委員会

#### Special Sponsorship of the 84th **National Speech Contest for Students of Schools** for the Blind and Visually Impaired

On October 2, 2015, the 84th National Speech Contest for Students of Schools for the Blind and Visually Impaired was held at Create Hamamatsu in Hamamatsu, Shizuoka Prefecture. The Sumitomo Group Public Affairs Committee is a special sponsor of this contest.

The first-place winner was Mr. Takeshi Watanabe whose speech was entitled "By the Light of the Moon." Mr. Watanabe used to be a teacher but his eyesight started to gradually deteriorate when he was 30, eventually compelling him to give up his career. He became depressed but his daughter's encouragement helped lift his spirits. He attends a school for the blind and visually impaired, which has enabled him to get his life back on track. His powerful voice and optimistic speech enchanted

the audience.

The first-place winner was awarded the Sumitomo Group Cup and the top three winners received an educational trip abroad. All the contestants received a commemorative gift.

#### 第84回全国盲学校 弁論大会を特別協賛

2015年10月2日、住友グループ広 報委員会が特別協賛する第84回全国 盲学校弁論大会全国大会が静岡県浜 松市のクリエート浜松で開催された。

「光り輝くあの月へ」と題した弁論を行 った渡邊健(わたなべ たけし)さんが優 勝した。教員だった渡邊さんは次第に 目が見えづらくなり、いらだちと切なさと の葛藤の日々を過ごしていたが、娘から 励まされたことを機に盲学校へ入学し、 新たな一歩を踏み出すことができたとい う。渡邊さんのよく通る声とすばらしい 話術は会場の聴衆を魅了した。

優勝者には住友グループ杯、3位ま での3名に副賞として海外研修旅行、 本大会出場者全員に優秀賞の副賞と して記念品が贈呈された。

21

SUMITAMA AUARTERI Y NO 143

# News & Topics

#### Sumitomo Group Public Affairs Committee 住友グループ広報委員会

#### 14th Intercollegiate **Negotiation Competition**

On November 21 and 22, 2015, the 14th Intercollegiate Negotiation Competition (INC) sponsored by the Sumitomo Group Public Affairs Committee was held at Sophia University in Chiyoda-ku, Tokyo. This competition encourages young people to cultivate arbitration and negotiation skills effective in an international setting. The Sumitomo Group Public Affairs Committee is eager to help foster people with international perspectives by providing opportunities for university students to acquire negotiation skills.

The contestants were 251 students from 21 universities, consisting of 15 universities in Japan, the University of Hong Kong, Team Australia (joint team of four Australian universities), and the National University of Singapore, which participated in INC for the first time. The firstprize winner was the National University of Singapore team to whom a cup was presented by the Sumitomo Group Public Affairs Committee. All the participants were presented with commemorative goods bearing the INC logo. They will also receive a DVD of the event later.



#### Sumitomo Group Public Affairs Committee 住友グループ広報委員会

#### Special TV drama benefits from Sumitomo Group **Public Affairs Committee's cooperation**





On January 3, 2016, a special New Year drama, "I have a farsighted plan—Biographies of unsung leaders of industrial innovation in the Meiji Era" was broadcast by the TBS network. This historical drama featured two leaders of Sumitomo who played important roles in industrial modernization in the Meiji Era: Saihei Hirose, the first Director General (played by Takaaki Enoki) and Teigo Iba, the second Director General (played by Ken Ishiguro).

#### 住友グループ広報委員会 協力のスペシャルドラマ放送

2016年1月3日TBS系列で新春 スペシャルドラマ「百年の計、我にあり 一知られざる明治産業維新リーダー伝 -」が放送された。住友グループの礎 を築き、明治時代の産業近代化に重 要な役割を果たした初代住友総理事・ 広瀬宰平 (ひろせさいへい)を榎木孝 明さんが、二代目総理事・伊庭貞剛(い ばていごう)を石黒賢さんが演じ、史実 に基づくドラマとなっていた。

Let's take a peek at bento boxed lunches of Sumitomo Group staff around Japan

全国各地の住友グループ社員の お弁当を紹介します





Healthy bento overflowing with fresh produce!

ヘルシー弁当に手抜きなし!



Kyozo Morioka

Manager,
Operation Plannning SMBC Friend Securities

SMBCフレンド証券 システム統括部管理課長 森岡 京三

Today's delicious bento consists of five dishes, including miso-marinated chicken, cellophane noodle salad, and simmered Japanese mustard spinach, Mrs. Morioka uses hardly any frozen foods, offthe-shelf products, or ready made dishes. She prepares everything to put in the bento on the day. She also makes bentos on weekends for their two young sons, enthusias tic soccer players who, like their father, appreciate home

この日の弁当は、鶏肉の味 噌漬け、春雨サラダ、小松 菜の煮びたしなど計5品。 冷凍食品や既製品、作り 置き総菜はほぼ使わず、週 末サッカークラブに所属す る伸び盛りの2人の息子 の分も含め、妻はすべてそ の日の朝に作る。

yozo Morioka, manager of the Operating Planning Department, is extremely busy planning and presenting new functions and demonstrating how to operate information systems. A nutritious bento lunch prepared by his wife each day keeps him full of energy.

"Ever since we married, my wife has been making me a bento lunch virtually every day for 14 years. As a single man, I used to eat out all the time and put on weight because of my unhealthy diet. I lost 8-9 kg in the first 18 months of married life thanks to my wife's nutritious cooking and because I began exercising.

The bento is elaborate. Germinated brown rice or rice with different grains cooked in an earthenware pot and several dishes featuring chicken and various vegetables. Morioka's wife gets up before 4:30 in the morning to prepare the bento for Morioka who leaves home at 5:45. To show his appreciation, it's the Morioka Family's tradition to dine out on weekend evenings.

工釜炊きの発芽米や五当は、とにかく手が込び8~9㎏やせました



SMBC Friend Securities became a wholly owned subsidiary of Sumitomo Mitsui Financial Group in 2006. With 58 branches and three satellite offices, the company's 2,000 employees offer services rooted in the community.

SMBCフレンド証券は、2006年に三井住友フィナンシ ャルグループの100%出資会社となった証券会社。全 国58支店、3サテライト、従業員数約2,000人という 体制で、地域に密着したサービスを展開する。