Reference Materials
Production System in Russia

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Executive Summary

1. CRM Role in Refinery Industry

2. CRM Categories in Russia and its differences

3. Production Stages

4. Certification Methods

5. Approval and Registration

6. International Cooperation: Round Robin Analyses and Sales
Certified Reference Materials Categories in Russia

- Company Approved CRM
- Industry Approved CRM
- Nationally Approved CRM
- Internationally Approved CRM
CRM Production Stages

Material Manufacturing

Sampling → Homogeneity analyses → Homogeneity?

4 Certification Methods

- Certified Procedure
- Calculation and Experimental Procedure
- Round Robin Analysis (Inter-lab Analysis)
- Reference Template
Company Certified Reference Materials: Approval and Registration

1. Metrological Expert Validation within the Company Laboratory
2. Company Executive Officer
3. Company Approved Certificate of Quality
Industry Certified Reference Material: Approval and Registration
Nationally Certified Reference Material: Approval and Registration

Sampling → Laboratory of National Science Institutes → Metrological Validation → Nationally Approved Certificate of Quality

CRM
Internationally Certified Reference Material: Approval and Registration

Interstate Committee of Standardization, Metrology & Certification

Document Validation

CRM

Internationally Approved Certificate of Quality

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Cooperation and implementation point at R&D Park

Krastsvetmet has a well-equipped R&D Park, a platform for creating new products, materials and technologies, and highly-skilled research groups working on the different topics of interest.

We are looking for industry-changing innovative solutions and launching a startup development program.

Our aim is to find best solutions that we can develop in collaboration with R&D Park jointly with researchers, innovative companies & entrepreneurs.

Topics of interest: metallurgy, refinery, precious metals applications (including medicine), additive manufacturing, environmental technologies, etc.

Timeline:

July
Submit your project to rnd@krastsvetmet.com

September
Projects selection

November
Mentoring
Final presentations

For all inquiries concerning innovations at Krastsvetmet:
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More information at www.rndpark.com/en

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Round Robin Analyses Cooperation

- Russia
- Kazakhstan
- Germany
- Switzerland
- Canada
- Japan
- Australia
- South Africa
- Belgium
CRM International Sales

- Russia
- Kazakhstan
- Belarus
- Uzbekistan
- Switzerland
- Great Britain
- Czech Republic
- Turkey
- Hong Kong
- USA
- China
- India
- Vietnam
- Bolivia
- Thailand

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Thank you for attention!

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