

Current Awareness Service

* 125 items of defence interest were selected from the periodical literature received in the Defence Science Library (DESIDOC) and disseminated through the publication, 'DESIDOC List'.

* The information on DRDO, Defence, and Science and Technology reported in daily newspapers was scanned and 863 selected items were brought to the notice of the top management in DRDO.

* Thirteen selected items containing information on developments in China and 24 items relating to science & technology in Pakistan were brought to the notice of concerned scientists through the two publications viz. 'Spot News on China' and 'Science and Technology in Pakistan'.

Library Activities

* 724 publications consisting of 389 books, 285 periodicals and 50 reports were loaned during August and September 1981. Some of the Dtes and Labs/Estts which availed the inter-library loan facility were Dte of Rockets and Missiles, SO to COAS, SPL, ISSA and DSC.

* 73 books, 39 technical reports and other publications were acquired by the Library during August and September 1981. 93 publications were accessioned for issuing to the scientists.

SDI Service

SDI bulletins on the following topics were prepared and supplied to the concerned Directorates in the DRDO HQ :

Topic	No.
Armament	1
Armoured Fighting Vehicles	5
Military & Naval Aircraft	2
Military Electronics	1
Materials	1
Military Organisation & Warfare	4
Naval Problems	1
Nuclear Weapons	1
Radar	2

Information Search

Information on the following subjects/topics was collected, on demand, from the literature available in the Library and supplied to the requestors :

1. Radioactive waste disposal
2. Chemical Industry in India
3. Electronic warfare
4. E-3A aircraft

Professional Activities

1. Participation in Courses

(a) DESIDOC participated in the refresher course 'New Developments in Classification and Cataloguing' organised by the Govt. of India Libraries Association (GILA) and Planning Commission Library from 7 to 15 Sept 1981. Shri V.K. Rangra, Scientist 'D', DESIDOC was a member of the faculty and delivered a lecture on Indexing. Dr. S. K. Goel and Smt. Shashi Tyagi of DESIDOC attended the Course.

(b) Shri O. P. Gupta, AO, DESIDOC attended the Administrative Management Course No. 1 from 1 to 18 Sept 1981 at DIWS, Mussoorie.

TRANSLATION ACTIVITIES

The following books/articles were translated during Aug-Sept 1981 :

S. No.	Title/Author	Indenting Unit	Pages Translated
RUSSIAN			
1.	Exterior ballistics by Ya. M. Shapire ; Chapter 2	IAT, Pune	44
2.	On plurality of structural transitions in Ti-Ni base alloys by D. B. Chernov <i>et al</i> ; Doklady, 247(4), 1979, 854-857.	CRE, Bangalore	4



2. Lectures Delivered

A lecture on 'Development of Translation Bank in DESIDOC' was delivered by Shri S. C. Saxena at DESIDOC on 18 August 1981.

Printing Activity

Printing and binding jobs received from the HQ's Directorates of Electronics, Technical Trg., Tech. Coord, Accounts & Stores, and also DSC, SPL, ISSA and INMAS were executed. In addition, the DESIDOC's publications, "Defence Reports Abstracts" and "Patents Information Alerts" were also printed. In all, jobs covering about 175 pages were printed and binding of 5341 copies of various publications was carried out.

Reprographic Activity

Reprocopies of 9279 pages from scientific/technical publications were made during Aug & Sept 1981 and supplied on the request of users. These users were from DRDO Labs/Estts such as TBRL, Chandigarh; INMAS, Delhi; DL, Jodhpur; DSC, Delhi; IAT, Pune; SPL, Delhi; DEAL Dehradun; SA to CAS.

39 black and white and 10 coloured slides were also prepared. Projection and photographic facilities were provided on four occasions at Vigvan Bhavan, Sena Bhavan, South Block and Metcalfe House in Delhi.

(Contd. from page 1)

3. Basic parameters of the explosive compaction of powders by E. S. Atroshenko <i>et al.</i> ; Fizika i Khimiya Obrabotki Materialov, I, 1974, 119-123.	DMRL, Hyderabad	5
4. Physical metallography of titanium by B. A. Kolachev; Chapter 3—Plastic deformation of titanium and its alloys.	-do-	10
5. GOST 15094-69 Electronic radio measuring apparatus; classification nomenclature.	DTD & P(AIR)	20
6. Fourth year over the planet; Aviatsiya i Kosmonavtika, 3, 1981, 44-45.	SA to CAS	2
7. Under the conditions of vertex ring; Aviatsiya i Kosmonavtika, 6, 1981, 28-30.	-do-	3
8. System of programmes for the calculation of jet engine characteristics by V. I. Yankin; Chapters 1&2.	CRD, Sunabeda	55

FRENCH

1. Ignition and extinction of solid propergols.	ERDL, Pune	16
2. Atomic cohesion and chemical adsorption at the solid/liquid interface.	DMRL, Hyderabad	11
3. Thermodynamic study of the solid/liquid interface stress for a binary metallic system; Pt. II.	-do-	11
4. Interfacial stresses of pure metals; Pt. II.	-do-	7
5. Evolution of the aircraft design with auto-controls.	CRE, Nasik	4

JAPANESE

1. Strength of unidirectional fibre-reinforced composite materials.	ADE, Bangalore	8
2. Polymerization of methyl methacrylate catalysed by benzoyl peroxide and carbon black surface.	DSC, Delhi	8
3. Synthesis of polyamide-imides and polyesterimides from 1,4,5-naphthelene tricarboxylic anhydride.	-do-	4
4. Synthesis and properties of polyesterimides containing bis-pthalimide component.	-do-	7
5. Synthesis of polyesterimides from 2,7-fluorenediol.	-do-	6
6. Photo sensor.	IRDE, Dehradun	22
7. Experimental study of smokeless ignitor for solid rocket motors.	ERDL, Pune	5
8. Combustion of low-oxidant propellant for RAM rocket.	-do-	8

9. Studies on solid booster. ERDL, Pune 7

GERMAN

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| 1. Operational advantages of an inertial navigation system with laser gyroscopes for combat helicopters: SEXTAN by H. Rolla; SV2/SFENA. Paper read at 13 Helicopter Forum; Buctekurg, 5-7, May 1980. | SA to CAS | 23 |
| 2. Self-protective device for helicopters through warning and interference units by Klaus Schubert; Standard Eletrik Loreuz AG Publication, dated May 1980. | -do- | 15 |
| 3. Some effects of injection pressure on quiescent direct injection diesel combustion by W. F. Bale; Motor-technikhe Zeit; 42(4), 1981, 141-169. | CVRDE, Madras | 7 |
| 4. Influence of back pressure at the injection nozzle on the injection characteristic of post controlled plunger type diesel fuel injection pump by Peter Herzog; MTZ, 41(12), 1980, 535-538. | -do- | 4 |
| 5. A constitutive equation for the creeping deformation of snow by Bruno Walter Salm; Dissertation No. 5861 for Doctor's degree (1977). | Snow & Avalanche Study Estt. | 90 |
| 6. Explosives & explosive stores (General regulations); Berufs Genossenschaft der Chemischen Industrie Pamphlet No. 460. | ARDE, Pune | 3 |
| 7. Production of pyrotechnical (Firework regulations); Berufs Genossenschaft der Chemischen Industrie Pamphlet No. 46 K. | -do- | 1 |
| 8. Production of fuzes; Berufs Genossenschaft der Chemischen Industrie Pamphlet No. 46 h. | -do- | 1 |
| 9. Testing of explosive materials by H. Koenen hide; Ex (7), 1955, 89-93. | TBRL, Chandigarh | 5 |
| 10. Technology for the production of composite double base propellants by W. Klohu; Report No. 2/74, Oct. 30, 1974 published by Pfinztal Berghausen bei Karlsruhe, Franeuhofer Gesllschaft. | ERDL, Pune | 28 |
| 11. Testing of explosive materials by H. Koenen hide; Ex (5, 6), 1955, 57-65. | TBRL, Chandigarh | 9 |
| 12. Calculation of pump limit of compressor units; Dissertation by Amin Mubrak presented to the faculty of Mech. Engg. at Tech. Univ. Hannover in 1965 for Doctor's degree. | GTRE, Bangalore | 74 |

Cash Awards for Best DSJ Papers

In order to encourage scientists to contribute high quality research papers and critical reviews to DEFENCE SCIENCE JOURNAL (DSJ), an AWARD of Rs. 500/- each will be made for the best two papers (either research papers or critical reviews) published in each issue of the Journal. Communications in all disciplines of science having a bearing on Defence problems are published in the Journal. Papers of applied nature will be preferred. The review papers should cover the state-of-art in the subject areas of Defence interest.

The Award is open to the scientists/technologists of DRDO, and other organisations as well.

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 Defence Scientific Information &
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 (DESIDOC),
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