

**ACTIVITY of CAJAD  
for the  
IAEA Technical Meeting:  
Vienna, Austria, 25-28 September 2006  
S.Babykina  
Nuclear Structure and Reaction Data Center,  
Kurchatov's Institute,  
Moscow**

Our **Exfor activity** had two main direction-

**1. Compilation A -Library.**

After last meeting 2005 we prepared **A061 Trans files**. This Trans files contains astrophysical data, fission data, monitor reaction data. The files include new entries and some corrected old entries according new rules .

**2. Team-work with NEA DATA-BANK.**

During 2005-2006 years 100 Entries were prepared and included in O-library. These Entries contain mainly differential data for elastic and inelastic scattering and production cross section radioactive and stable isotopes, data for material analysis by charged beams. This work is orientated mainly for nuclear wastes transformation , medical applications and material analysis.

**3. Checking Codes.**

We use to check our TRANSES and ENTRIES two checking codes-

- our checking code
- CHEX

It is very useful, because the codes are not similar and different errors are finding.

**4. According to the conclusion last meeting EPJ/A and YF journals review was performed by CAJAD and will distribution right now.**

**The European Physical Journal A - Hadrons and Nuclei Publisher: Springer  
Berlin / Heidelberg ISSN:)**  
**Issue: Volume 26, Number 2 , p.271-275-for CAJAD**

**Mass distribution studies in the  $^{19}\text{F} + ^{197}\text{Au}$  reaction**

R. Tripathi<sup>1</sup> and A. Goswami<sup>1</sup>

<i>Lab</i>	<i>inc.proj.</i>	<i>energy</i>	<i>center</i>	<i>data form</i>	<i>status</i>	<i>an</i>
3INDTRM	F-19	96,100-MEV	CAJAD	TABLE		A0741

**volume 26, Number 2 , p.301-305-FOR CAJAD+NEADB**

**First direct measurement of the total cross-section of  $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$**  D. Schürmann<sup>1</sup>, A. Di Leva<sup>1</sup>, L. Gialanella<sup>2</sup>, D. Rogalla<sup>3</sup>, F. Strieder<sup>1</sup> and other<sup>4</sup>, A. D'Onofrio<sup>3</sup>, G. Imbriani<sup>2</sup>, R. Kunz<sup>1</sup>, C. Lubritto<sup>3</sup>, A. Ordine<sup>2</sup>, V. Roca<sup>2</sup>, C. Rolfs<sup>1</sup>, M. Romano<sup>2</sup>, F. Schümann<sup>1</sup>, F. Terrasi<sup>3</sup> and H. -P. Trautvetter<sup>1</sup>

<i>Lab</i>	<i>inc.proj.</i>	<i>energy</i>	<i>center</i>	<i>data form</i>	<i>status</i>	<i>an</i>
2GERBOC	A	1.9-3.2-MEV	CAJAD +NEADB	TABLE		O1308

**Issue: Volume 27, Number 3, Pages: 301 - 312 –FOR NEADB+CAJAD**

**Gamma-ray spectroscopy of the nucleus  $^{139}\text{Ce}$**

D. Bucurescu<sup>1</sup> G. Căta-Danil<sup>1</sup>, I. Căta-Danil<sup>1</sup>, M. Ivașcu<sup>1</sup>, N. Mărginean<sup>1</sup>, R. Mărginean<sup>1</sup>, L. C. Mihăilescu<sup>1</sup>, C. Rus

<i>Lab</i>	<i>inc.proj.</i>	<i>energy</i>	<i>center</i>	<i>data form</i>	<i>status</i>	<i>an</i>
3RUMRUM	P	5-6-MEV	CAJAD +NEADB	TABLE		O1401

C-12 50.5-MEV

**Issue: Volume 27, Supplement 1, page 141-144 Date: March 2006-**

**For ATOMKI**

**$^{106,108}\text{Cd}$  ( $p,\gamma$ ) $^{107,109}\text{In}$  cross-sections for the astrophysical p-process**

Gy. Gyürky<sup>1</sup>, G. G. Kiss<sup>1,2</sup>, Z. Elekes<sup>1</sup>, Zs. Fülöp<sup>1</sup> and E. Somorjai<sup>1</sup>

<i>Lab</i>	<i>inc.proj.</i>	<i>energy</i>	<i>center</i>	<i>data form</i>	<i>status</i>	<i>an</i>
3HUNDEB	P	2.4-4.8-MEV	ATOMKI	graph		

**Issue: Volume 27, Supplement 1, page 145-148 Date: March 2006-**

**For NNDC**

<i>Lab</i>	<i>inc.proj.</i>	<i>energy</i>	<i>center</i>	<i>data form</i>	<i>status</i>	<i>an</i>
1USANOT	A	8-12MEV	NNDC	graph		

**Issue: Volume 27, Supplement 1, page 153-158 Date: March 2006-**

**For CDFE**

**Photonuclear reaction data and  $\gamma$ -ray sources for astrophysics**

H. Utsunomiya<sup>1</sup>, Goko<sup>1</sup>, H. Toyokawa<sup>2</sup>, H. Ohgaki<sup>3</sup>, K. Soutome<sup>4</sup>, H. Yonehara<sup>4</sup>, S. Goriely<sup>5</sup>, P. Mohr<sup>6</sup> and Zs. Fülöp<sup>7</sup>

<i>Lab</i>	<i>inc.proj.</i>	<i>energy</i>	<i>center</i>	<i>data form</i>	<i>status</i>	<i>an</i>
2JPNKTO	G	10-MEV	CDFE	graph		

**Issue: Volume 27, Supplement 1, page 187-192 Date: March 2006-**

**For ATOMKI**

**Study of the  $^{106}\text{Cd}(\alpha,\alpha)^{106}\text{Cd}$  scattering at energies relevant to the p-process**

G. G. Kiss<sup>1, 2</sup>, Zs. Fülöp<sup>1</sup>, Gy. Gyürky<sup>1</sup>, Z. Máté<sup>1</sup>, E. Somorjai<sup>1</sup>, D. Galaviz<sup>3</sup>, A. Kretschmer<sup>3</sup>, K. Sonnabend<sup>3</sup> and A. Zilges<sup>3</sup>

**Lab inc.proj. energy center data form status an**

3HUNDEB A 15.5-19-MEV ATOMKI graph

**Issue: Volume 27, Supplement 1, page 233-236 Date: March 2006-**

**For JCPRG**

**Study of the  $^{26}\text{Si}(\text{p},\gamma)^{27}\text{P}$  reaction through Coulomb dissociation of  $^{27}\text{P}$**

Y. Togano<sup>1</sup>, T. Gomi<sup>1</sup>, T. Motobayashi<sup>2</sup>, Y. Ando<sup>1</sup>, N. Aoi<sup>2</sup>, H. Baba<sup>1</sup>, K. Demichi<sup>1</sup>, Z. Elekes<sup>2, 3</sup>, N. Fukuda<sup>2</sup>, Zs. Fülöp<sup>3</sup>, U. Futakami<sup>1</sup>, H. Hasegawa<sup>1</sup>, Y. Higurashi<sup>2</sup>, K. Ieki<sup>1</sup>, N. Imai<sup>2</sup>, M. Ishihara<sup>2</sup>, K. Ishikawa<sup>4</sup>, N. Iwasa<sup>5</sup>, H. Iwasaki<sup>6</sup>, S. Kanno<sup>1</sup>, Y. Kondo<sup>4</sup>, T. Kubo<sup>2</sup>, S. Kubono<sup>7</sup>, M. Kunibu<sup>1</sup>, K. Kurita<sup>1</sup>, Y. U. Matsuyama<sup>1</sup>, S. Michimasa<sup>7</sup>, T. Minemura<sup>2</sup>, M. Miura<sup>4</sup>, H. Murakami<sup>1</sup>, T. Nakamura<sup>4</sup>, M. Notani<sup>7</sup>, S. Ota<sup>8</sup>, A. Saito<sup>1</sup>, H. Sakurai<sup>6</sup>, M. Serata<sup>1</sup>, S. Shimoura<sup>7</sup>, T. Sugimoto<sup>4</sup>, E. Takeshita<sup>1</sup>, S. Takeuchi<sup>2</sup>, K. Ue<sup>6</sup>, K. Yamada<sup>1</sup>, Y. Yanagisawa<sup>2</sup>, K. Yoneda<sup>2</sup> and A. Yoshida<sup>2</sup>

**Lab inc.proj. energy center data form status an**

2JPNIPC P 1439-MEV JCPRG graph

**Issue: Volume 28,NUMBER 2 , page 193-203, 2006-**

**For NEADB+CAJAD**

Excitation functions of evaporation residues in the interaction of  $^{16}\text{O}$  with  $^{103}\text{Rh}$  at incident energies up to 400 MeV

E. Z. Buthelezi<sup>1</sup>, F. Cerutti<sup>2</sup>, E. Gadioli<sup>2</sup>, G. F. Steyn<sup>1</sup>, A. Pepe<sup>2</sup>, S. H. Connell<sup>3</sup> and A. A. Cowley<sup>1, 4</sup>

**Lab inc.proj. energy center data form status an**

3SAFITH O--16 40-400MEV NDB+CAJAD GRAPH

**Issue: Volume 28,NUMBER 3 , page 295-299,2006-**

**For NEADB+CAJAD**

**Scattering of  $^{11}\text{Be}$  halo nucleus from  $^{209}\text{Bi}$  at the Coulomb barrier**

M. Mazzocco<sup>1</sup>, C. Signorini<sup>1</sup>, M. Romoli<sup>2</sup>, A. De Francesco<sup>2</sup>, M. Di Pietro<sup>2</sup>, E. Vardaci<sup>2</sup>, K. Yoshida<sup>3</sup>, A. Yoshida<sup>3</sup>, R. Bonetti<sup>4</sup>, A. De Rosa<sup>2</sup>, T. Glodariu<sup>1, 5</sup>, A. Guglielmetti<sup>4</sup>

**Lab inc.proj. energy center data form status an**

2ITYPAD BE-11 40-MEV NDB+CAJAD TABLE

**Physics of Atomic Nuclei –**

december 2005 -- Volume 68, Issue 12, pp. 1957-1967 ---for CAJAD

**Investigation of the Mechanism of the Reaction  $^{10}\text{B}(d, p\gamma) ^{11}\text{B}$**

**at  $Ed = 15.3 \text{ MeV}$  by the Method of Angular  $p\gamma$  Correlations**

**L. I. Galanina, N. S. Zelenskaya, A. V. Ignatenko,**

**V. M. Lebedev, N. V. Orlova, O. I. Serikov, and A. V. Spassky\***

<i>Lab</i>	<i>inc.proj.</i>	<i>energy</i>	<i>center</i>	<i>data form</i>	<i>status an</i>
4RUSMOS	D	15.3-mev	CAJAD	graph	in process

september 2005 -- Volume 68, Issue 09, pp. 1417-1420 ---for CDFE

**Independent Yields of Kr and Xe Fragments**

**in the Photofission of  $^{237}\text{Np}$  and  $^{243}\text{Am}$  Odd Nuclei**

**Yu. P. Gangrsky\*, V. I. Zhemenik, G. V. Mishinsky, and Yu. E. Penionzhkevich**

<i>Lab</i>	<i>inc.proj.</i>	<i>energy</i>	<i>center</i>	<i>data form</i>	<i>status an</i>
4ZZZDUB	G	25	CDFE		table

january 2006 -- Volume 69, Issue 2, pp. 189-196 ---for CAJAD

**Differential Analyzing Power in  $pp$  Scattering on a  $^{28}\text{Si}$  Nucleus  
in the Case of the Excitation of High-Spin Particle-Hole States**

**A. V. Plavko<sup>1</sup>) and M. S. Onegin<sup>2)\*</sup>**

<i>Lab</i>	<i>inc.proj.</i>	<i>energy</i>	<i>center</i>	<i>data form</i>	<i>status an</i>
4RUSLIN	P		CAJAD	graph	in process

january 2006 -- Volume 69, Issue 3, pp. 452-459 ---for CAJAD

**Polarization in Quasielastic ( $p, 2p 2p$ ) Scattering on a  $^4\text{He}$  Nucleus at 1 GeV**

**O. V. Miklukho, G. M. Amalsky, V. A. Andreev, S. L. Belostotsky and other**

<i>Lab</i>	<i>inc.proj.</i>	<i>energy</i>	<i>center</i>	<i>data form</i>	<i>status an</i>
4RUSLIN	P	1-Gev	CAJAD	table+graph	in process

august 2006 -- Volume 69, Issue 8, pp. 1399

-- For JCPRG

**Evidence of Complete Fusion in the Sub barrier**

**$^{16}\text{O} + ^{238}\text{U}$  Reaction\***

**K. Nishio, H. Ikezoe, M. Asai, K. Tsukada, S. Mitsuoka,**

**K. Tsuruta, K. Satou, C. J. Lin**

<i>Lab</i>	<i>inc.proj.</i>	<i>energy</i>	<i>center</i>	<i>data form</i>	<i>status an</i>
2JPNJPN	O-16		JCPRG		