

**Prof. Dr. Georgiy V. Girichev**

Prof. Dr. Nina I. Giricheva  
Prof. Natalya V. Belova  
Prof. Sergey A. Shlykov  
Dr. Alexander V. Krasnov  
Dr. Olga G. Krasnova  
Dr. Elena A. Lapykina  
Dr. Vyacheslav M. Petrov  
Dr. Valentina N. Petrova  
Dr. Valery V. Sliznev  
Dr. Natalia V. Tverdova  
Ph. D. Mikhail S. Fedorov  
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Ph.D. Dmitriy Yu. Osadchiy  
Ph.D. Oleg A. Pimenov  
Ph. D. Alexander E. Pogonin  
Ph. D. Denis S. Savelyev  
Ph.D. Phien D. Tran  
Ph. D. Nguen Hoang Trang  
Ph. D. Valeria V. Tyunina  
Ivanovo State University of  
Chemistry and Technology  
Department Physics  
Engels av. 7  
153000 Ivanovo  
Russia

Telephone: (+7) (4932) 359874

Telefax: (+7) (4932) 417995

E-Mail: girichev@isuct.ru

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<b>Br<sub>3</sub>Y</b>	<b>Yttrium tribromide</b> Structure by QC calculations <i>L. E. Khaustova and S. A. Shlykov</i> Manuscript in preparation
<b>C<sub>4</sub>H<sub>14</sub>OSi<sub>3</sub></b>	<b>1-Methoxy-1,3,5-trisilacyclohexane</b> Structure by QC calculations <i>B. V. Puchkov and S. A. Shlykov</i> QC calculations in progress
<b>C<sub>4</sub>H<sub>14</sub>Si<sub>3</sub></b>	<b>1-Methyl-1,3,5-trisilacyclohexane</b> Structure by QC calculations <i>B. V. Puchkov and S. A. Shlykov</i> QC calculations in progress
<b>C<sub>5</sub>H<sub>19</sub>NSi<sub>3</sub></b>	<b>N,N-Dimethylamine-1,3,5-trisilacyclohexane</b> Structure by GED/MS and QC calculations <i>B. V. Puchkov and S. A. Shlykov</i> Refinement finished
<b>C<sub>6</sub>H<sub>6</sub></b>	<b>Benzene</b> Structure by GED/MS and QC <i>N. W. Mitzel, N. V. Tverdova, A. A. Otlyotov, V. M. Petrov, V. N. Petrova, N. I. Giricheva, and G. V. Girichev</i> Manuscript in preparation
<b>C<sub>6</sub>H<sub>7</sub>NO</b>	<b>4-Methylpyridine-N-oxide</b> Structure by GED/MS and QC calculations <i>N. V. Belova, G. V. Girichev, N. I. Giricheva, K. A. Korolkova, and V. E. Kotova</i> J. Mol Struct., <b>1156</b> (2018) 210

<b>C<sub>6</sub>H<sub>10</sub>N<sub>2</sub></b>	<b>N-Cyanopiperidine</b> Structure by GED/MS, QC calculations, IR <i>S. A. Shlykov, T. D. Phien, and P. M. Weber</i> J. Mol. Struct., <b>1138</b> (2017) 41
<b>C<sub>6</sub>H<sub>14</sub>OSi</b>	<b>1-Methoxy-1-silacyclohexane</b> Structure by GED/MS and QC <i>S. A. Shlykov, B. V. Puchkov, I. Arnason, S. O. Wallevik, N. I. Giricheva, G. V. Girichev, and Yu. A. Zhabanov</i> J. Mol. Struct., <b>1154</b> (2018) 570
<b>C<sub>7</sub>H<sub>10</sub>F<sub>3</sub>NO</b>	<b>1-Trifluoroacetyl piperidine</b> Structure by GED/MS, QC calculations, IR <i>T. D. Phien, S. A. Shlykov, and N. H. Trang</i> Tetrahedron, <b>73</b> (2017) 5311
<b>C<sub>7</sub>H<sub>11</sub>N</b>	<b>Cyanocyclohexane</b> Structure by GED/MS QC <i>L. E. Khaustova, S. A. Shlykov, and T. D. Phien</i> Refinement in progress
<b>C<sub>10</sub>H<sub>6</sub>Cl<sub>2</sub>O<sub>4</sub>S<sub>2</sub></b>	<b>1,5-Naphthalene disulfonylchloride</b> IR spectrum <i>N. I. Giricheva, G. V. Girichev, D. Christen, S. N. Ivanov, V. M. Petrov, and V. N. Petrova</i> Manuscript in preparation
<b>C<sub>10</sub>H<sub>6</sub>Cl<sub>2</sub>O<sub>4</sub>S<sub>2</sub></b>	<b>1,5-Naphthalene disulfonylchloride</b> Structure by GED/MS and QC calculations <i>V. M. Petrov, N. I. Giricheva, S. N. Ivanov, V. N. Petrova, and G. V. Girichev</i> J. Mol. Struct., <b>1132</b> (2017) 56
<b>C<sub>10</sub>H<sub>7</sub>ClO<sub>2</sub>S</b>	<b>β-Naphthalene sulfonylchloride</b> IR spectrum <i>N. I. Giricheva, G. V. Girichev, D. Christen, S. N. Ivanov, V. M. Petrov, and V. N. Petrova</i> Manuscript in preparation
<b>C<sub>10</sub>H<sub>7</sub>ClO<sub>2</sub>S</b>	<b>α-Naphthalene sulfonylchloride</b> IR spectrum <i>N. I. Giricheva, G. V. Girichev, D. Christen, S. N. Ivanov, V. M. Petrov, and V. N. Petrova</i> Manuscript in preparation
<b>C<sub>10</sub>H<sub>9</sub>NO<sub>2</sub>S</b>	<b>β-Naphthalenesulfonamide</b> IR spectrum <i>N. I. Giricheva, G. V. Girichev, D. Christen, S. N. Ivanov, V. M. Petrov, and V. N. Petrova</i> Manuscript in preparation
<b>C<sub>10</sub>H<sub>9</sub>NO<sub>2</sub>S</b>	<b>α-Naphthalene sulfonamide</b> IR spectrum <i>N. I. Giricheva, G. V. Girichev, D. Christen, S. N. Ivanov, V. M. Petrov, and V. N. Petrova</i> Manuscript in preparation
<b>C<sub>10</sub>H<sub>18</sub>Si<sub>2</sub></b>	<b>1,4-Bis(trimethylsilyl)-1,3-butadiyne</b> Structure by GED/MS and QC <i>N. V. Tverdova, A. A. Otyotov, N. I. Giricheva, N. W. Mitzel, and G. V. Girichev</i> Manuscript in preparation
<b>C<sub>11</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub></b>	<b>L-Tryptophan</b> Structure by GED/MS and QC <i>V. V. Tyunina, N. I. Giricheva, and G. V. Girichev</i> Manuscript in preparation

$C_{12}H_{10}$	<p><b>Acenaphthene</b>  Structure by GED/MS and QC  <i>N. V. Tverdova, A. A. Otlyotov, N. I. Giricheva, N. W. Mitzel, and G. V. Girichev</i>  Manuscript in preparation</p>
$C_{12}H_{14}N_2O_2S$	<p><b>5-(Dimethylamino)naphthalene-1-sulfonamide (Dansylamide)</b>  Conformer structure by GED/MS QC calculations  <i>M. Dakkouri, G. V. Girichev, N. I. Giricheva, V. M. Petrov, and V. N. Petrova</i>  Manuscript submitted□</p>
$C_{12}H_{18}Si$	<p><b>1-Methyl-1-phenyl-1-silacyclohexane</b>  GED/MS and QC  <i>T. D. Phien, S. A. Shlykov, and B. A. Shaingan</i>  Tetrahedron, <b>73</b> (2017) 1127</p>
$C_{12}H_8$	<p><b>Acenaphthylene</b>  Structure by QC  <i>N. V. Tverdova, A. A. Otlyotov, N. I. Giricheva, N. W. Mitzel, and G. V. Girichev</i>  Manuscript in preparation</p>
$C_{14}H_{10}$	<p><b>Anthracene</b>  Structure by GED/MS and QC  <i>N. W. Mitzel, N. V. Tverdova, A. A. Otlyotov, V. M. Petrov, V. N. Petrova, N. I. Giricheva, and G. V. Girichev</i>  Manuscript in preparation</p>
$C_{15}H_{21}FeO_6$	<p><b>Iron tris-acetylacetonate</b>  Molecular and electronic structure by GED/MS and QC  <i>A. A. Petrova, N. V. Tverdova, N. I. Giricheva, and G. V. Girichev</i>  Izv.Vys.Uch.Zav.,Khim.Khim.Tekhnol., <b>60</b> (2017) 97</p>
$C_{15}H_{21}MnO_6$	<p><b>Manganese tris-acetylacetonate</b>  Molecular and electronic structure by QC  <i>R. J. F. Berger, G. V. Girichev, A. A. Petrova, V. V. Sliznev, N. V. Tverdova, and N. I. Giricheva</i>  Izv.Vys.Uch.Zav.,Khim.Khim.Tekhnol., <b>60</b> (2017) 47</p>
$C_{15}H_{21}MnO_6$	<p><b>Manganese tris-acetylacetonate</b>  Molecular and electronic structure by GED/MS and QC  <i>R. J. F. Berger, G. V. Girichev, N. I. Giricheva, A. A. Petrova, and N. V. Tverdova</i>  Angew.Chem.Int.Ed.,Engl., <b>56</b> (2017) 15751</p>
$C_{16}N_{16}S_4Zn$	<p><b>Zinc tetrakis-(1,2,5-thiadiazolo)porphyrzine</b>  Structure by GED/MS and QC  <i>N. V. Tverdova, N. I. Giricheva, D. S. Savelyev, M. S. Mikhailov, N. Vogt, O. I. Koifman, P. A. Stuzhin, and G. V. Girichev</i>  Macroheterocycles, <b>10</b> (2017) 27</p>
$C_{20}H_4F_{24}GdO_8$	<p><b>Gadolinium tetrakis hexafluoroacetylacetonate</b>  Structure by GED/MS QC calculations  <i>G. V. Girichev, N. I. Giricheva, A. E. Khochenkov, N. V. Belova, and V. V. Sliznev</i>  Manuscript in preparation</p>
$C_{20}H_4F_{24}LaO_6$	<p><b>Lanthanum tetrakis hexafluoroacetylacetonate</b>  MS/Td  <i>A. E. Khochenkov, N. V. Belova, A. V. Krasnov, Yu. A. Zhabanov, N. I. Giricheva, and G. V. Girichev</i>  Manuscript in preparation</p>
$C_{20}H_4F_{24}LuO_6$	<p><b>Lutetium tetrakis hexafluoroacetylacetonate</b>  MS/Td</p>

	A. E. Khochenkov, N. V. Belova, A. V. Krasnov, Yu. A. Zhabanov, N. I. Giricheva, and G. V. Girichev Manuscript in preparation
$C_{24}H_{26}Si_2$	<b>1,8-Bis(trimethylsilylethynyl)anthracene</b> Structure by GED/MS and QC calculations A. A. Otlyotov, J.-H. Lamm, S. Blomeyer, N. W. Mitzel, V. V. Rybkin, Yu. A. Zhabanov, N. V. Tverdova, N. I. Giricheva, and G. V. Giricheva Phys. Chem. Chem. Phys., <b>19</b> (2017) 13093
$C_{26}H_{16}N_8$	<b>Hemiporphyrizine</b> Structure by GED/MS and QC Yu. A. Zhabanov, A. E. Pogonin, A. A. Otlyotov, M. K. Islyaikin, and G. V. Girichev Manuscript in preparation
$C_{28}H_{18}N_6$	<b>Dicarbahemiporphyrizine</b> Structure by GED/MS and QC Yu. A. Zhabanov, A. E. Pogonin, A. A. Otlyotov, M. K. Islyaikin, and G. V. Girichev Manuscript in preparation
$C_{28}H_{28}N_4Ni$	<b>Nickel octamethylporphyrin</b> Structure by GED/MS and QC A. E. Pogonin, N. V. Tverdova, Yu. V. Minenkov, N. I. Giricheva, and G. V. Girichev Manuscript in preparation
$C_{30}H_{54}Co_4O_{13}$	<b>Hexakis[μ-(2,2-dimethylpropanoato)]μ4-oxatetracobalt</b> Structure by GED/MS and QC calculations A. S. Alikhanyan, G. V. Girichev, N. I. Giricheva, E. A. Morozova, and I. I. Nikitin Manuscript in preparation
$C_{32}H_{36}CoN_4$	<b>Cobalt etioporphyrin-II</b> Structure by GED/MS and QC G. V. Girichev, A. E. Pogonin, N. V. Tverdova, and N. I. Giricheva Manuscript in preparation
$C_{32}H_{36}N_4Ni$	<b>Nickel-etioporphyrin-II</b> Structure by GED/MS and QC G. V. Girichev, A. E. Pogonin, N. V. Tverdova, and N. I. Giricheva Manuscript in preparation
$C_{33}H_{57}O_6Tm$	<b>Tris(dipivaloylmethanato)thulium</b> Structure by GED/MS QC calculations O. A. Pimenov, N. V. Belova, and V. V. Sliznev J. Mol. Struct., <b>1132</b> (2017) 167
$C_{44}H_{28}N_4Pd$	<b>Palladium tetraphenylporphyrin</b> Structure by GED/MS and QC, IR spectrum D. S. Savelyev, N. V. Tverdova, N. I. Giricheva, N. Vogt, J. Vogt, and G. V. Girichev Manuscript is ready
$C_{44}H_{28}N_4Zn$	<b>Zinc tetraphenylporphyrin</b> Structure by GED/MS and QC, IR spectrum D. S. Savelyev, N. V. Tverdova, N. I. Giricheva, V. A. Ol'shevckaya, N. Vogt, J. Vogt, and G. V. Girichev Manuscript is ready
$Cl_4Nb$	<b>Niobium tetrachloride</b> Structure by GED/MS QC calculations V. V. Sliznev, S. V. Smorodin, and G. V. Girichev Manuscript in preparation
	<b>Time-resolved electron diffraction</b>

	<p>Photodissociation dynamics of spatially aligned molecules  <i>L. Schäfer, A. A. Ischenko, Yu. A. Zhabanov, A. A. Otyotov, and G. V. Girichev</i>  <i>Izv. Vys. Uch. Zav.</i>, <b>60</b> (2017) 4</p>
	<p><b>Benzenesulfonic acid hydrazides</b>  Conformational properties and structure of the conformers by QC  <i>M. S. Fedorov and N. I. Giricheva</i>  <i>J. Struct. Chem.</i>, <b>58</b> (2017) 236</p>
	<p><b>1,8-Naphthosultam derivatives</b>  Geometrical and electronic structure and optical properties by QC  <i>M. S. Fedorov, N. I. Giricheva, E. A. Lapykina, and O. A. Suvorova</i>  <i>Opt. Spect.</i>, <b>123</b> (2017) 231</p>
	<p><b>Propyloxy derivatives</b>  Structure of 4'-pyridyl 4-n-propyloxybenzoate, 4-n-propyloxybenzoic acid, 4-n-propyloxycinnamic acid by QC  <i>M. S. Fedorov, N. I. Giricheva, K. E. Shpilevaya, E. A. Lapykina, and S. A. Syrбу</i>  <i>J. Mol. Struct.</i>, <b>1132</b> (2017) 50</p>
	<p><b>Methane hydrates</b>  Electronic, geometrical, vibrational and energetic characteristics by QC  <i>N. I. Giricheva, A. A. Ischenko, V. I. Yusupov, V. N. Bagratashvili, and G. V. Girichev</i>  <i>J. Mol. Struct.</i>, <b>1132</b> (2017) 157</p>
	<p><b>Propyloxy derivatives</b>  Structure of 4-n-propyloxybenzoic acid, 4-propyloxy-4'-cyanobiphenyl by QC  <i>N. I. Giricheva, M. S. Fedorov, K. E. Shpilevaya, S. A. Syrбу, and O. Yu. Ditsina</i>  <i>J. Struct. Chem.</i>, <b>58</b> (2017) 9</p>
	<p><b>Pyridine derivatives</b>  Structure of H-complexes by QC, IR spectrum  <i>N. I. Giricheva, M. S. Fedorov, S. A. Surby, K. E. Shpilevaya, E. M. Chernova, and M. R. Kiselev</i>  <i>Liq. Cryst. and their Appl.</i>, <b>17</b> (2017) 41</p>
	<p><b>Tris(dipivaloylmethanato) lanthanides,</b>  Infrared and Raman spectra of Ln(thd)<sub>3</sub> (Ln = La, Nd, Eu, Gd, Tb, Ho, Er, Tm, Yb, Lu)  <i>N. V. Belova, V. V. Sliznev, and D. Christen</i>  <i>J. Mol. Struct.</i>, <b>1132</b> (2017) 34</p>
	<p><b>Molybdenum and tungsten halides</b>  Geometrical and electronic structure of the MX<sub>3</sub> and MX<sub>4</sub> (M = Mo, W; X = F, Cl): Jahn-Teller effect and spin-orbit coupling  <i>V. V. Sliznev and N. V. Belova</i>  <i>J. Mol. Struct.</i>, <b>1132</b> (2017) 63</p>
	<p><b>Alternative structural analysis</b>  An approach to gas electron diffraction method  <i>Yu. A. Zhabanov and A. E. Pogonin</i>  <i>Comput. Theor. Chem.</i>, <b>1123</b> (2018) 149</p>
	<p><b>Magnesium porphyrine derivatives</b>  Structure by QC  <i>Yu. A. Zhabanov, N. V. Tverdova, N. I. Giricheva, G. V. Girichev, and P. A. Stuzhin</i>  <i>J. Porph. Phthal.</i>, <b>21</b> (2017) 439</p>
	<p><b>Alloys</b>  Phase Formation Enthalpies of Alloys and Refractories Decomposition Products  <i>Yu. Minenkov, V. V. Sliznev, and L. Cavallo</i>  <i>Inorg. Chem.</i>, <b>56</b> (2017) 1386</p>