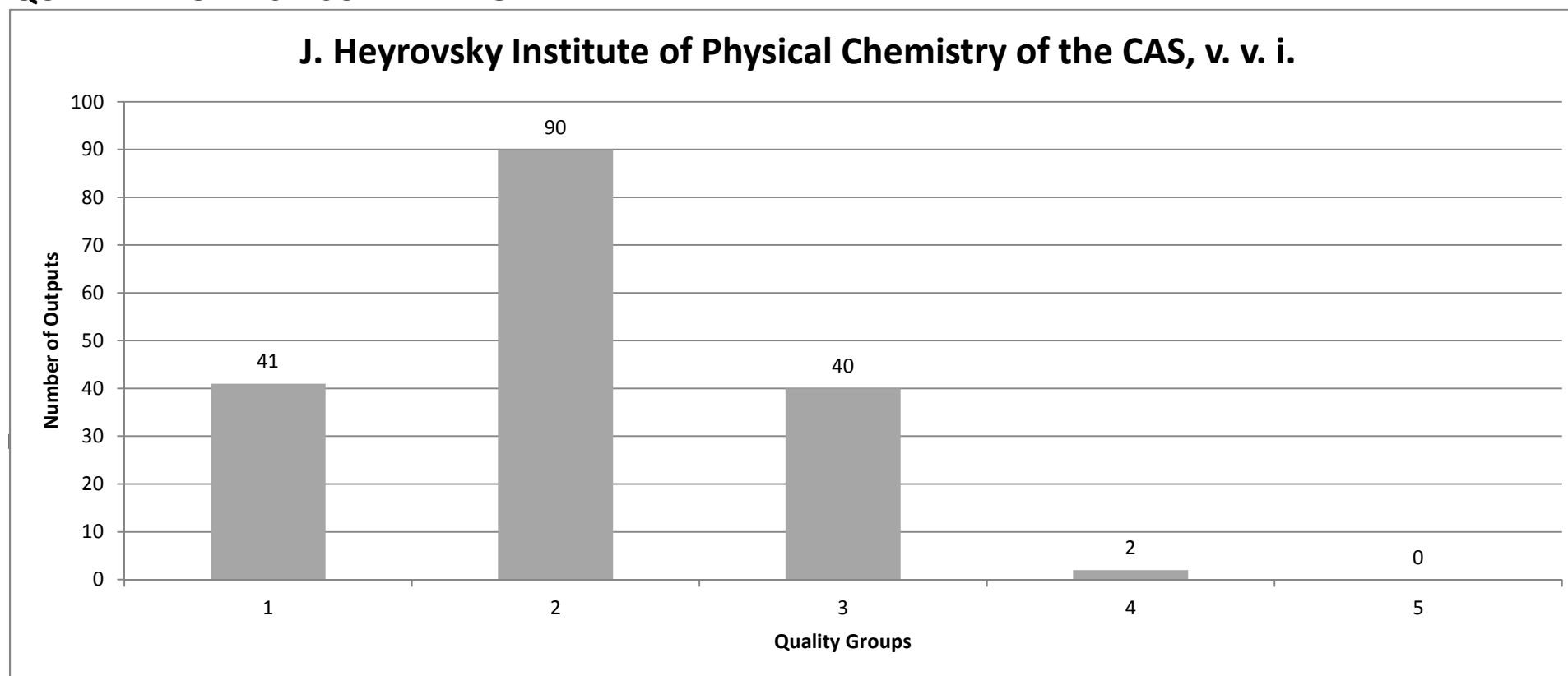


## QUALITY PROFILES - SUMMARY GRAPH



### Quality Groups:

**(1):** Quality that is **world-leading** in terms of originality, significance and rigour.

**(2):** Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.

**(3):** Quality that is **recognized internationally** in terms of originality, significance and rigour.

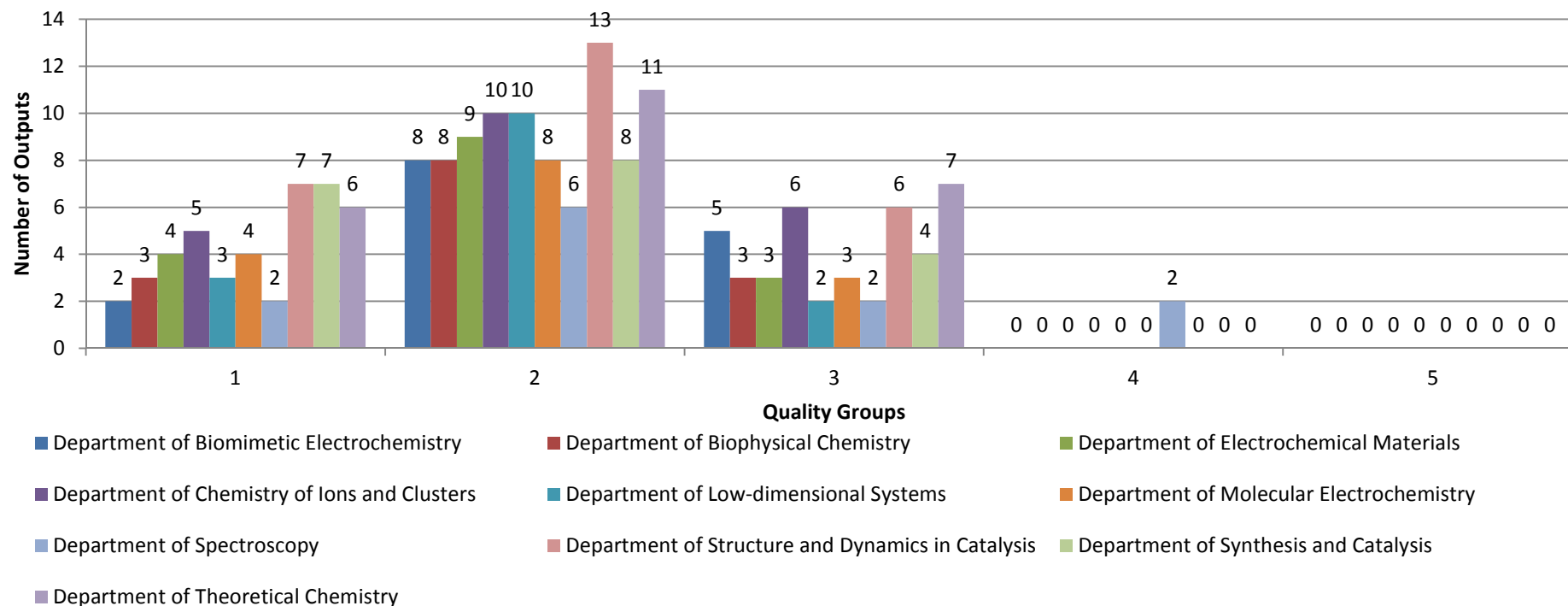
**(4):** Quality that is **recognized nationally** in terms of originality, significance and rigour.

**(5):** Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

This plot is presented as an aggregate of data from the Phase I of evaluation for convenience of evaluators in the Phase II.

## QUALITY PROFILES

### J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.



#### Quality Groups:

(1): Quality that is **world-leading** in terms of originality, significance and rigour.

(2): Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.

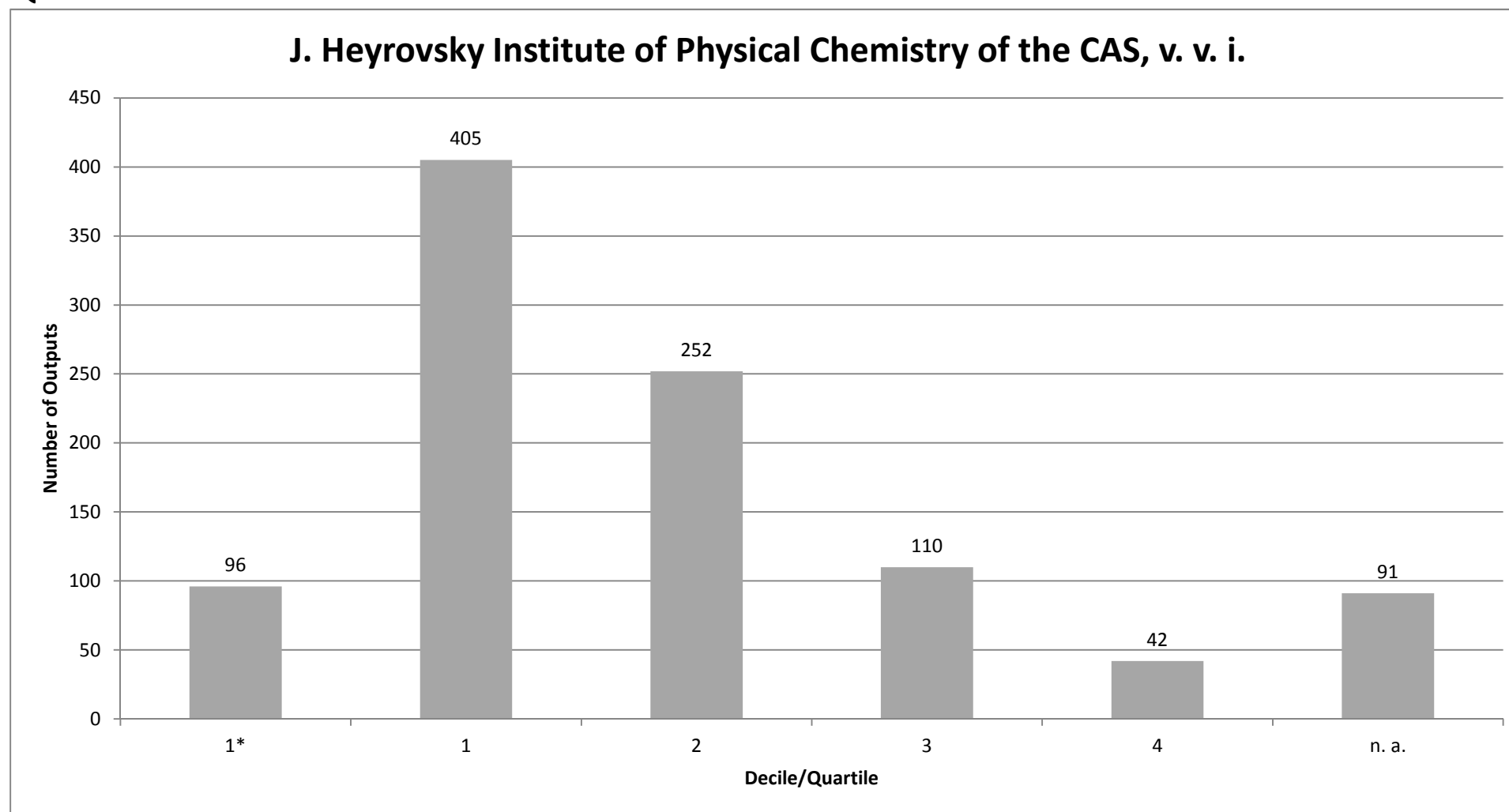
(3): Quality that is **recognized internationally** in terms of originality, significance and rigour.

(4): Quality that is **recognized nationally** in terms of originality, significance and rigour.

(5): Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

This plot is presented as an aggregate of data from the Phase I of evaluation for convenience of evaluators in the Phase II; the columns represent outputs (not productivity) and cannot be directly compared each other.

## QUALITY OF OUTPUTS BY JOURNALS - SUMMARY GRAPH

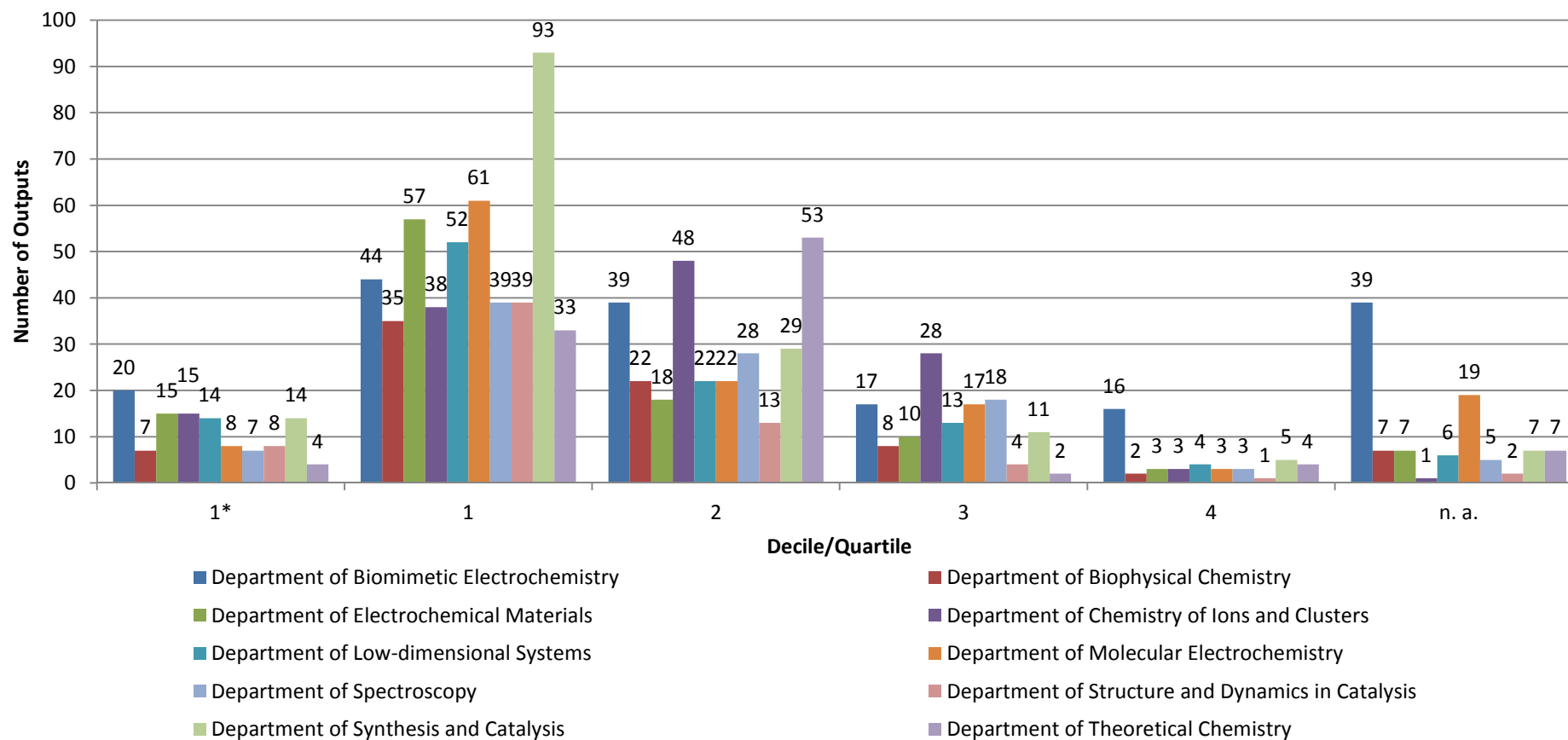


Number of outputs in top decile (1\*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down).

This plot is presented as an aggregate of bibliometric data for convenience of evaluators.

## QUALITY OF OUTPUTS BY JOURNALS

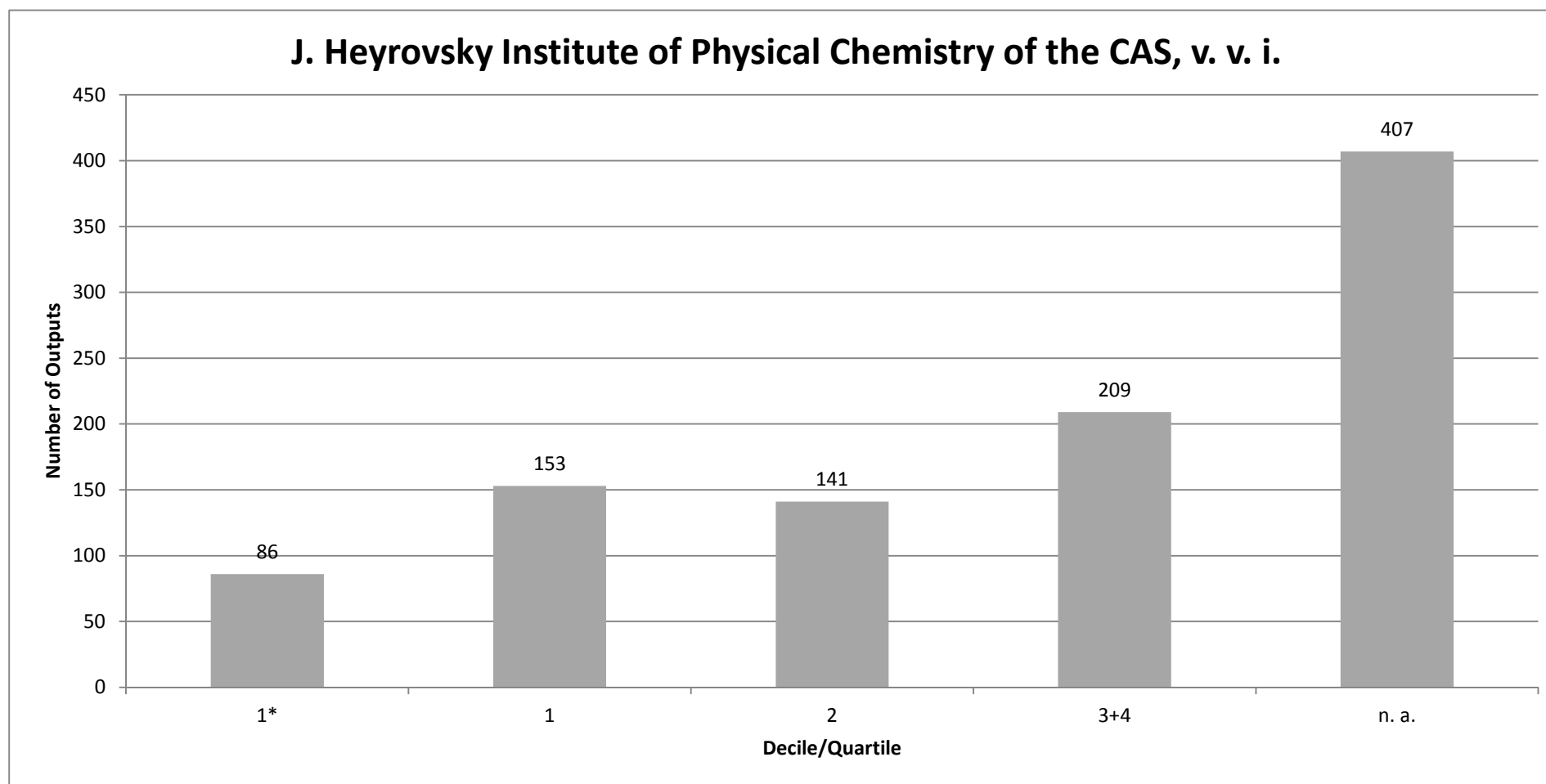
### J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.



Number of outputs in top decile (1\*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down).

This plot is presented as an aggregate of bibliometric data for convenience of evaluators; the columns represent outputs (not productivity) and cannot be directly compared each other.

**QUALITY OF OUTPUTS BY INTENSITY OF CITATIONS - SUMMARY GRAPH**

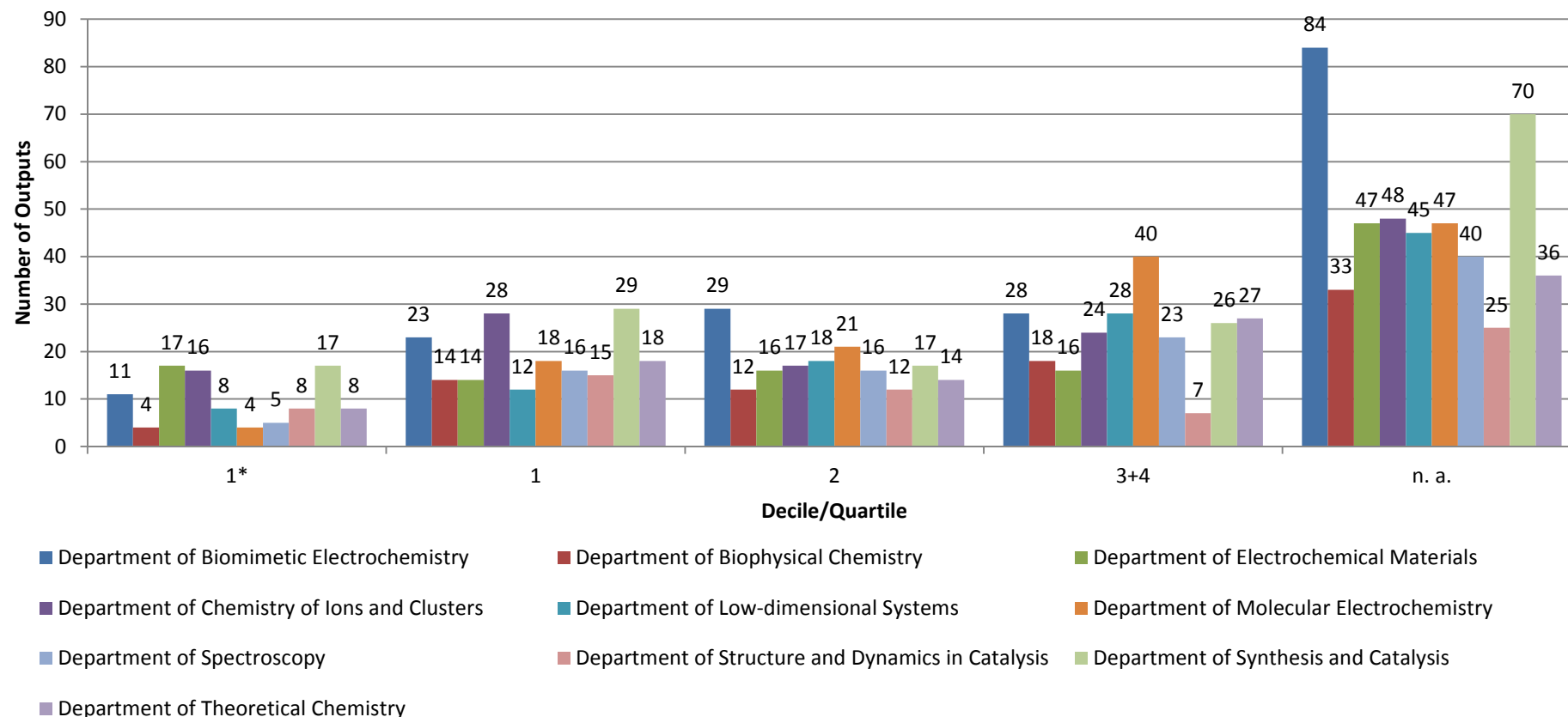


Number of outputs in the top decile (1\*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down).

This plot is presented as an aggregate of bibliometric data for convenience of evaluators.

## QUALITY OF OUTPUTS BY INTENSITY OF CITATIONS

### J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.



Number of outputs in the top decile (1\*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down).

This plot is presented as an aggregate of bibliometric data for convenience of evaluators; the columns represent outputs (not productivity) and cannot be directly compared each other.

# Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014

## RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS

**Institute:** J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.

**Team:** Department of Biophysical Chemistry

**Head:** prof. Martin Hof, Dr.rer.nat. DSc.

**Total number of outputs :** 94      **Evaluated outputs :** 14 (0)      **Outputs for bibliometry :** 81      **Large collaborations outputs:** 0

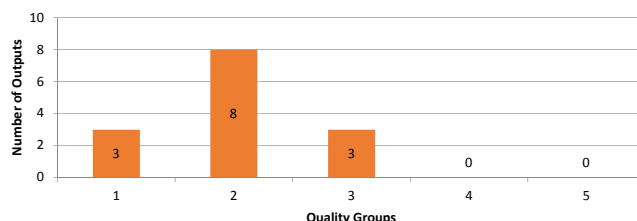
### Quality Groups of Outputs (Results of the Phase I.)

Quality	1	2	3	4	5
Outputs	3	8	3	0	0

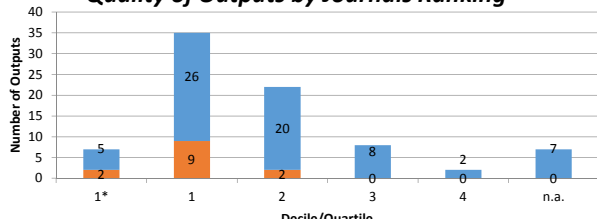
#### Quality Groups:

- (1): Quality that is **world-leading** in terms of originality, significance and rigour.  
 (2): Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.  
 (3): Quality that is **recognized internationally** in terms of originality, significance and rigour.  
 (4): Quality that is **recognized nationally** in terms of originality, significance and rigour.  
 (5): Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

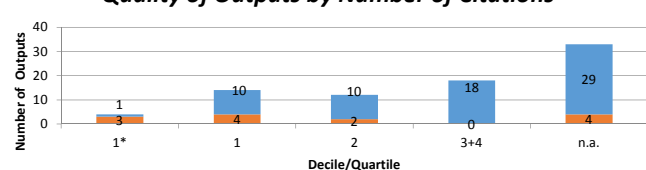
### Quality Profile



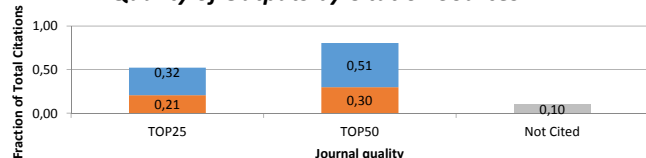
### Quality of Outputs by Journals Ranking



### Quality of Outputs by Number of Citations



### Quality of Outputs by Citation Sources



### Field Structure of Outputs

Field Structure of Outputs	Outputs
CHEMISTRY, PHYSICAL	18
CHEMISTRY, MULTIDISCIPLINARY	14
BIOCHEMISTRY & MOLECULAR BIOLOGY	10
BIOPHYSICS	7
CHEMISTRY, ANALYTICAL	6
PHARMACOLOGY & PHARMACY	5
ELECTROCHEMISTRY	5
PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	3
OPTICS	2
POLYMER SCIENCE	2
CELL BIOLOGY	2
MATERIALS SCIENCE, MULTIDISCIPLINARY	1
PHYSICS, NUCLEAR	1
ENGINEERING, BIOMEDICAL	1
PHYSIOLOGY	1
CHEMISTRY, INORGANIC & NUCLEAR	1
BIOCHEMICAL RESEARCH METHODS	1
CHEMISTRY, MEDICINAL	1

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry:** publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile:** number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking:** number of outputs in top decile (1\*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1\*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

# Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014

## RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS

**Institute:** J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.

**Team:** Department of Biomimetic Electrochemistry

**Head:** prof. RNDr. Zdeněk Samec, DrSc.

**Total number of outputs :** 214      **Evaluated outputs :** 15 (0)      **Outputs for bibliometry :** 175      **Large collaborations outputs:** 0

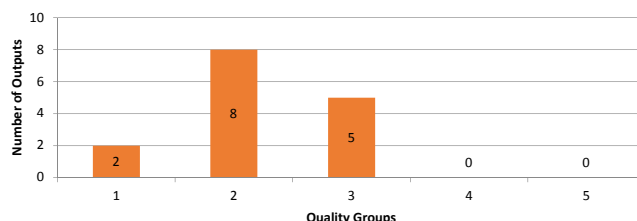
### Quality Groups of Outputs (Results of the Phase I.)

Quality	1	2	3	4	5
Outputs	2	8	5	0	0

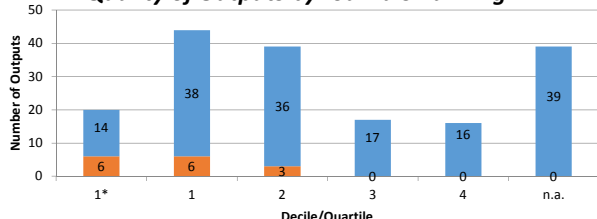
#### Quality Groups:

- (1): Quality that is **world-leading** in terms of originality, significance and rigour.  
 (2): Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.  
 (3): Quality that is **recognized internationally** in terms of originality, significance and rigour.  
 (4): Quality that is **recognized nationally** in terms of originality, significance and rigour.  
 (5): Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

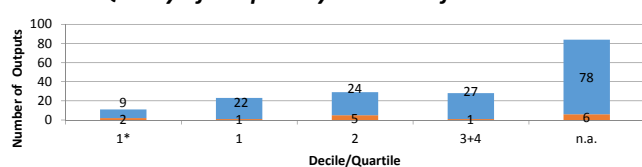
### Quality Profile



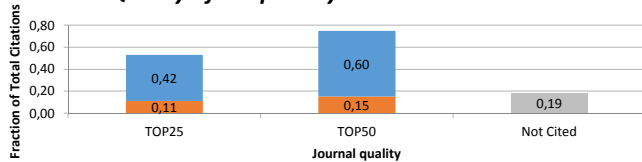
### Quality of Outputs by Journals Ranking



### Quality of Outputs by Number of Citations



### Quality of Outputs by Citation Sources



### Field Structure of Outputs

Field Structure of Outputs	Outputs
ELECTROCHEMISTRY	67
CHEMISTRY, INORGANIC & NUCLEAR	30
CHEMISTRY, MULTIDISCIPLINARY	20
CHEMISTRY, ANALYTICAL	14
CHEMISTRY, PHYSICAL	12
ENGINEERING, CHEMICAL	7
CHEMISTRY, ORGANIC	4
PHARMACOLOGY & PHARMACY	2
ENVIRONMENTAL SCIENCES	2
ENDOCRINOLOGY & METABOLISM	2
MATERIALS SCIENCE, MULTIDISCIPLINARY	2
PHYSIOLOGY	1
ENGINEERING, ENVIRONMENTAL	1
PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH	1
CRYSTALLOGRAPHY	1
PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	1
SPECTROSCOPY	1
PSYCHIATRY	1
SUBSTANCE ABUSE	1
AGRICULTURE, DAIRY & ANIMAL SCIENCE	1
BIOCHEMISTRY & MOLECULAR BIOLOGY	1
UROLOGY & NEPHROLOGY	1
MULTIDISCIPLINARY SCIENCES	1
NEUROSCIENCES	1

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry:** publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile:** number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking:** number of outputs in top decile (1\*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1\*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.



# Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014

## RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS

**Institute:** J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.

**Team:** Department of Electrochemical Materials

**Head:** prof. RNDr. Ladislav Kavan, DrSc.

**Total number of outputs :** 145      **Evaluated outputs :** 16 (0)      **Outputs for bibliometry :** 110      **Large collaborations outputs:** 0

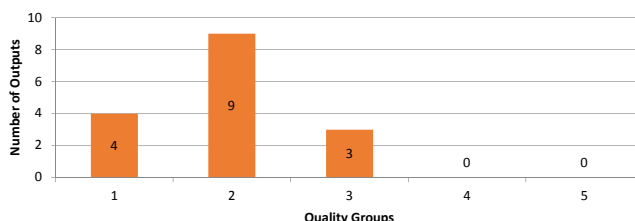
### Quality Groups of Outputs (Results of the Phase I.)

Quality	1	2	3	4	5
Outputs	4	9	3	0	0

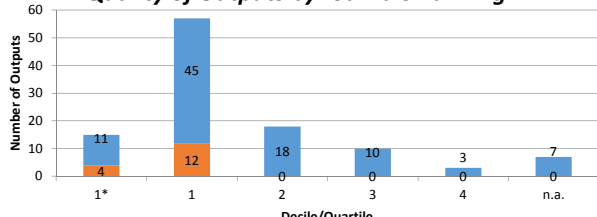
#### Quality Groups:

- (1): Quality that is **world-leading** in terms of originality, significance and rigour.  
 (2): Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.  
 (3): Quality that is **recognized internationally** in terms of originality, significance and rigour.  
 (4): Quality that is **recognized nationally** in terms of originality, significance and rigour.  
 (5): Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

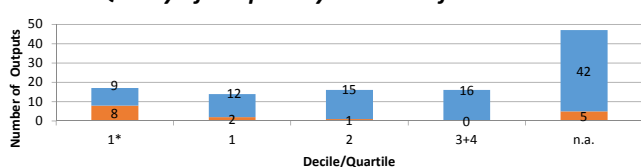
### Quality Profile



### Quality of Outputs by Journals Ranking



### Quality of Outputs by Number of Citations



### Quality of Outputs by Citation Sources



### Field Structure of Outputs

Field Structure of Outputs	Outputs
CHEMISTRY, PHYSICAL	24
CHEMISTRY, MULTIDISCIPLINARY	21
ELECTROCHEMISTRY	12
CHEMISTRY, APPLIED	11
MATERIALS SCIENCE, MULTIDISCIPLINARY	10
PHYSICS, CONDENSED MATTER	10
CHEMISTRY, ANALYTICAL	3
MATERIALS SCIENCE, COATINGS & FILMS	3
MULTIDISCIPLINARY SCIENCES	3
PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	3
ENGINEERING, CHEMICAL	3
NANOSCIENCE & NANOTECHNOLOGY	1
ENGINEERING, ELECTRICAL & ELECTRONIC	1
MATERIALS SCIENCE, CERAMICS	1
CHEMISTRY, INORGANIC & NUCLEAR	1
MATERIALS SCIENCE, BIOMATERIALS	1
ENGINEERING, CIVIL	1
ENERGY & FUELS	1

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry:** publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile:** number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking:** number of outputs in top decile (1\*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1\*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

**Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014**  
**RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS**

**Institute:** J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.

**Team:** Department of Chemistry of Ions and Clusters

**Head:** prof. RNDr. Patrik Španěl, Dr.rer.nat.

**Total number of outputs :** 158      **Evaluated outputs :** 21 (0)      **Outputs for bibliometry :** 133      **Large collaborations outputs:** 0

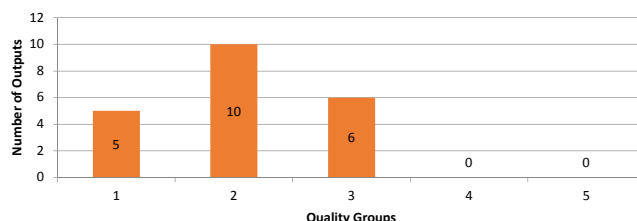
**Quality Groups of Outputs (Results of the Phase I.)**

Quality	1	2	3	4	5
Outputs	5	10	6	0	0

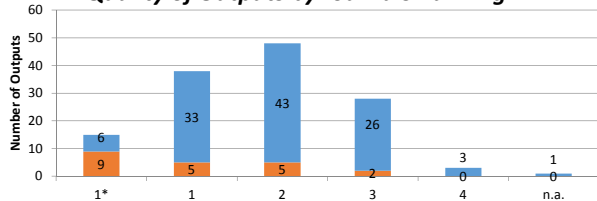
**Quality Groups:**

- (1): Quality that is **world-leading** in terms of originality, significance and rigour.  
 (2): Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.  
 (3): Quality that is **recognized internationally** in terms of originality, significance and rigour.  
 (4): Quality that is **recognized nationally** in terms of originality, significance and rigour.  
 (5): Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

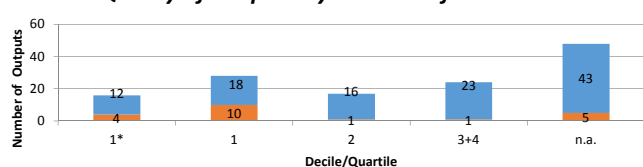
**Quality Profile**



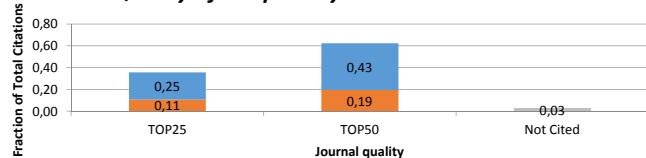
**Quality of Outputs by Journals Ranking**



**Quality of Outputs by Number of Citations**



**Quality of Outputs by Citation Sources**



**Field Structure of Outputs**

Field Structure of Outputs	Outputs
CHEMISTRY, ANALYTICAL	30
PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	24
CHEMISTRY, PHYSICAL	22
CHEMISTRY, INORGANIC & NUCLEAR	16
BIOCHEMICAL RESEARCH METHODS	8
SPECTROSCOPY	7
FOOD SCIENCE & TECHNOLOGY	4
CHEMISTRY, MULTIDISCIPLINARY	4
RESPIRATORY SYSTEM	3
ASTRONOMY & ASTROPHYSICS	2
CHEMISTRY, ORGANIC	2
AGRICULTURE, MULTIDISCIPLINARY	1
ENVIRONMENTAL SCIENCES	1
MICROBIOLOGY	1
NUTRITION & DIETETICS	1
OPTICS	1
ENGINEERING, CHEMICAL	1
ENGINEERING, BIOMEDICAL	1
PHYSICS, MULTIDISCIPLINARY	1
INSTRUMENTS & INSTRUMENTATION	1
BIOTECHNOLOGY & APPLIED MICROBIOLOGY	1
MEDICINE, GENERAL & INTERNAL	1

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry:** publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile:** number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking:** number of outputs in top decile (1\*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1\*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

**Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014**  
**RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS**

**Institute:** J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.

**Team:** Department of Molecular Electrochemistry

**Head:** Mgr. Magdalena Hromádová, Ph. D.

**Total number of outputs :** 147      **Evaluated outputs :** 15 (0)      **Outputs for bibliometry :** 130      **Large collaborations outputs:** 0

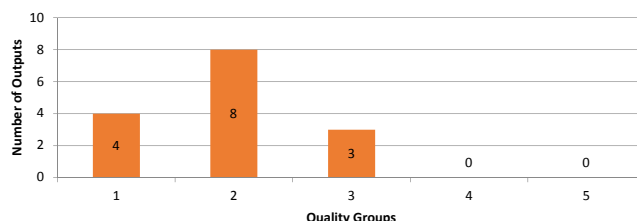
**Quality Groups of Outputs (Results of the Phase I.)**

Quality	1	2	3	4	5
Outputs	4	8	3	0	0

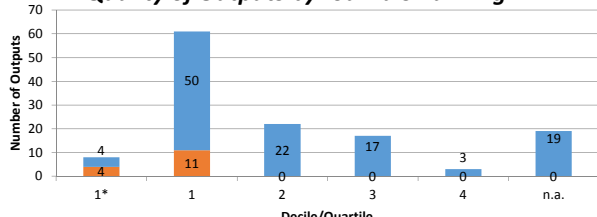
**Quality Groups:**

- (1): Quality that is **world-leading** in terms of originality, significance and rigour.  
 (2): Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.  
 (3): Quality that is **recognized internationally** in terms of originality, significance and rigour.  
 (4): Quality that is **recognized nationally** in terms of originality, significance and rigour.  
 (5): Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

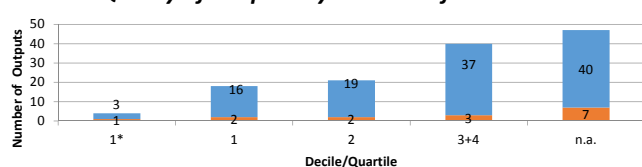
**Quality Profile**



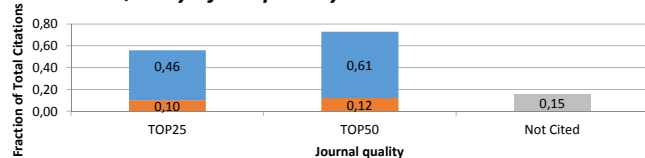
**Quality of Outputs by Journals Ranking**



**Quality of Outputs by Number of Citations**



**Quality of Outputs by Citation Sources**



**Field Structure of Outputs**

Field Structure of Outputs	Outputs
CHEMISTRY, INORGANIC & NUCLEAR	34
CHEMISTRY, MULTIDISCIPLINARY	27
ELECTROCHEMISTRY	27
CHEMISTRY, PHYSICAL	9
CHEMISTRY, ORGANIC	7
ENGINEERING, CHEMICAL	7
CRYSTALLOGRAPHY	3
PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	3
MATERIALS SCIENCE, MULTIDISCIPLINARY	2
MATERIALS SCIENCE, TEXTILES	2
CHEMISTRY, ANALYTICAL	2
ACOUSTICS	2
BIOLOGY	1
BIOPHYSICS	1
SPECTROSCOPY	1
CHEMISTRY, APPLIED	1
PHARMACOLOGY & PHARMACY	1

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry:** publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile:** number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking:** number of outputs in top decile (1\*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1\*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

# Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014

## RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS

**Institute:** J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.

**Team:** Department of Low-dimensional Systems

**Head:** RNDr. Ing. Martin Kalbáč, Ph. D.

**Total number of outputs :** 116      **Evaluated outputs :** 15 (0)      **Outputs for bibliometry :** 111      **Large collaborations outputs:** 0

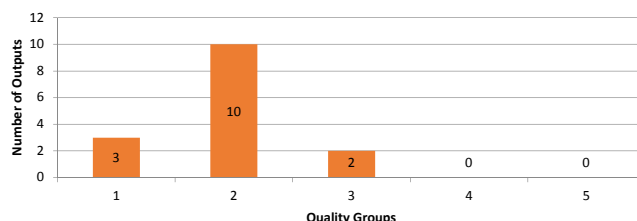
### Quality Groups of Outputs (Results of the Phase I.)

Quality	1	2	3	4	5
Outputs	3	10	2	0	0

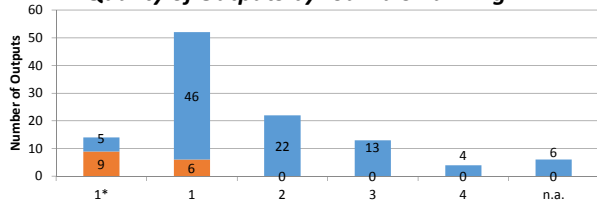
#### Quality Groups:

- (1): Quality that is **world-leading** in terms of originality, significance and rigour.  
 (2): Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.  
 (3): Quality that is **recognized internationally** in terms of originality, significance and rigour.  
 (4): Quality that is **recognized nationally** in terms of originality, significance and rigour.  
 (5): Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

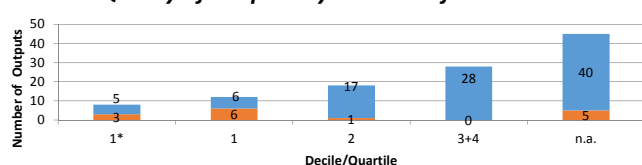
### Quality Profile



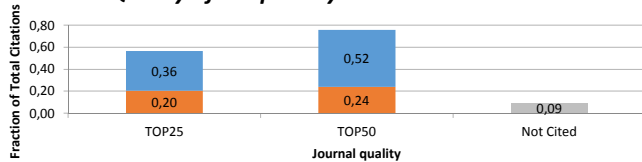
### Quality of Outputs by Journals Ranking



### Quality of Outputs by Number of Citations



### Quality of Outputs by Citation Sources



### Field Structure of Outputs

Field Structure of Outputs	Outputs
CHEMISTRY, PHYSICAL	27
CHEMISTRY, MULTIDISCIPLINARY	21
PHYSICS, CONDENSED MATTER	12
MATERIALS SCIENCE, MULTIDISCIPLINARY	7
CHEMISTRY, APPLIED	6
MATERIALS SCIENCE, COATINGS & FILMS	5
CHEMISTRY, INORGANIC & NUCLEAR	5
CHEMISTRY, ANALYTICAL	3
METALLURGY & METALLURGICAL ENGINEERING	2
ENGINEERING, CHEMICAL	2
NANOSCIENCE & NANOTECHNOLOGY	2
MULTIDISCIPLINARY SCIENCES	2
ELECTROCHEMISTRY	2
PHYSICS, APPLIED	2
ENGINEERING, CIVIL	1
ENGINEERING, ELECTRICAL & ELECTRONIC	1
MICROSCOPY	1
ENGINEERING, BIOMEDICAL	1
MATERIALS SCIENCE, BIOMATERIALS	1
ENVIRONMENTAL SCIENCES	1
PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	1
PHYSICS, MULTIDISCIPLINARY	1
CHEMISTRY, ORGANIC	1
PHYSIOLOGY	1
POLYMER SCIENCE	1
BIOPHYSICS	1
INSTRUMENTS & INSTRUMENTATION	1

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry:** publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile:** number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking:** number of outputs in top decile (1\*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1\*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

**Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014**  
**RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS**

**Institute:** J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.

**Team:** Department of Spectroscopy

**Head:** Prof. RNDR. Svatopluk Civiš, CSc.

**Total number of outputs :** 115      **Evaluated outputs :** 12 (0)      **Outputs for bibliometry :** 100      **Large collaborations outputs:** 0

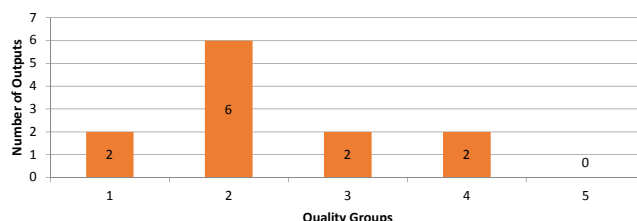
**Quality Groups of Outputs (Results of the Phase I.)**

Quality	1	2	3	4	5
Outputs	2	6	2	2	0

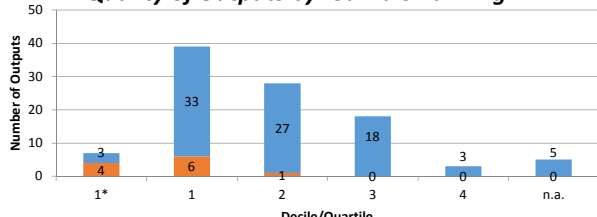
**Quality Groups:**

- (1): Quality that is **world-leading** in terms of originality, significance and rigour.  
 (2): Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.  
 (3): Quality that is **recognized internationally** in terms of originality, significance and rigour.  
 (4): Quality that is **recognized nationally** in terms of originality, significance and rigour.  
 (5): Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

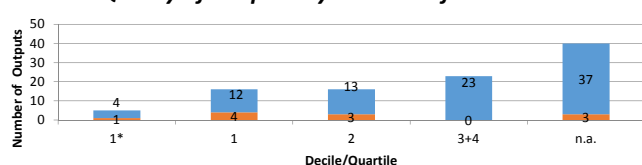
**Quality Profile**



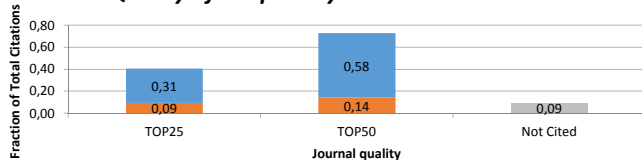
**Quality of Outputs by Journals Ranking**



**Quality of Outputs by Number of Citations**



**Quality of Outputs by Citation Sources**



**Field Structure of Outputs**

Field Structure of Outputs	Outputs
CHEMISTRY, PHYSICAL	21
OPTICS	11
PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	11
CHEMISTRY, INORGANIC & NUCLEAR	8
SPECTROSCOPY	8
MATERIALS SCIENCE, MULTIDISCIPLINARY	5
CHEMISTRY, MULTIDISCIPLINARY	5
CHEMISTRY, ANALYTICAL	4
ASTRONOMY & ASTROPHYSICS	4
ENGINEERING, ELECTRICAL & ELECTRONIC	3
CRYSTALLOGRAPHY	3
PHYSICS, MATHEMATICAL	3
ENGINEERING, CHEMICAL	2
ELECTROCHEMISTRY	1
DERMATOLOGY	1
ENVIRONMENTAL SCIENCES	1
PHYSICS, APPLIED	1
PHYSICS, FLUIDS & PLASMAS	1
ENGINEERING, BIOMEDICAL	1
PHYSICS, MULTIDISCIPLINARY	1
MINERALOGY	1
PHYSICS, NUCLEAR	1
MULTIDISCIPLINARY SCIENCES	1
ONCOLOGY	1
MATERIALS SCIENCE, BIOMATERIALS	1

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry:** publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile:** number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking:** number of outputs in top decile (1\*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1\*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

# Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014

## RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS

**Institute:** J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.

**Team:** Department of Structure and Dynamics in Catalysis

**Head:** Doc. Ing. Zdeněk Sobalík, CSc.

**Total number of outputs :** 113      **Evaluated outputs :** 26 (0)      **Outputs for bibliometry :** 67      **Large collaborations outputs:** 0

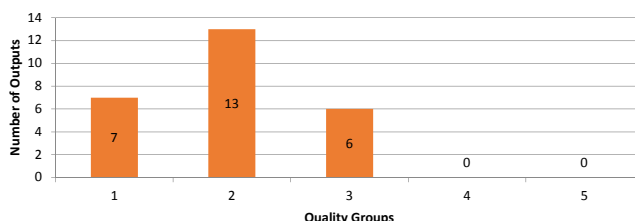
### Quality Groups of Outputs (Results of the Phase I.)

Quality	1	2	3	4	5
Outputs	7	13	6	0	0

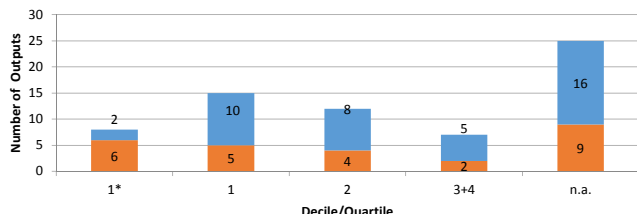
#### Quality Groups:

- (1): Quality that is **world-leading** in terms of originality, significance and rigour.  
 (2): Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.  
 (3): Quality that is **recognized internationally** in terms of originality, significance and rigour.  
 (4): Quality that is **recognized nationally** in terms of originality, significance and rigour.  
 (5): Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

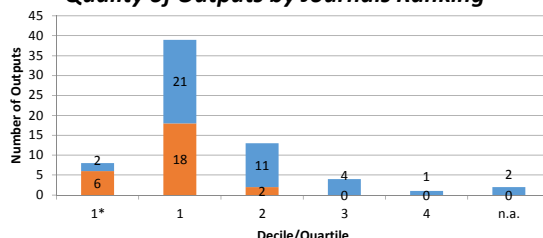
### Quality Profile



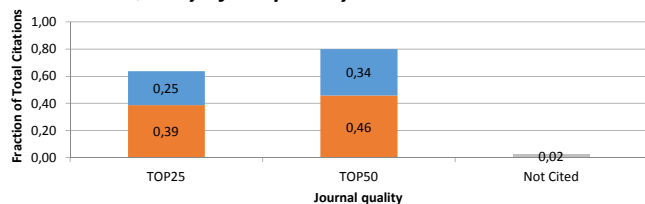
### Quality of Outputs by Number of Citations



### Quality of Outputs by Journals Ranking



### Quality of Outputs by Citation Sources



### Field Structure of Outputs

Field Structure of Outputs	Outputs
CHEMISTRY, APPLIED	13
CHEMISTRY, PHYSICAL	12
CHEMISTRY, MULTIDISCIPLINARY	12
ENGINEERING, CHEMICAL	8
MATERIALS SCIENCE, MULTIDISCIPLINARY	6
MATERIALS SCIENCE, CERAMICS	4
ENVIRONMENTAL SCIENCES	3
POLYMER SCIENCE	2
ELECTROCHEMISTRY	2
PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	1
PHYSICS, APPLIED	1
ENGINEERING, CIVIL	1
MINERALOGY	1
ENERGY & FUELS	1

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry:** publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile:** number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking:** number of outputs in top decile (1\*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1\*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.



# Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014

## RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS

**Institute:** J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.

**Team:** Department of Synthesis and Catalysis

**Head:** Prof. Ing. Jiří Čejka, DSc.

**Total number of outputs :** 173      **Evaluated outputs :** 19 (0)      **Outputs for bibliometry :** 159      **Large collaborations outputs:** 0

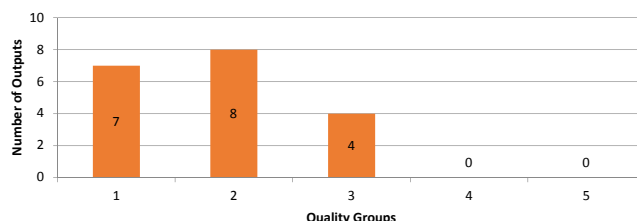
### Quality Groups of Outputs (Results of the Phase I.)

Quality	1	2	3	4	5
Outputs	7	8	4	0	0

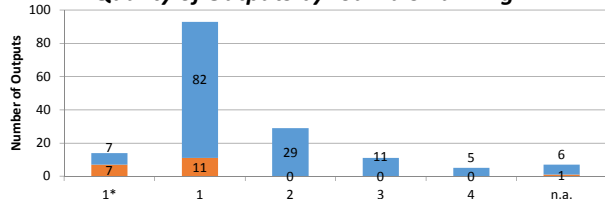
#### Quality Groups:

- (1): Quality that is **world-leading** in terms of originality, significance and rigour.  
 (2): Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.  
 (3): Quality that is **recognized internationally** in terms of originality, significance and rigour.  
 (4): Quality that is **recognized nationally** in terms of originality, significance and rigour.  
 (5): Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

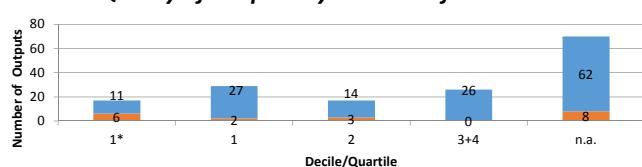
### Quality Profile



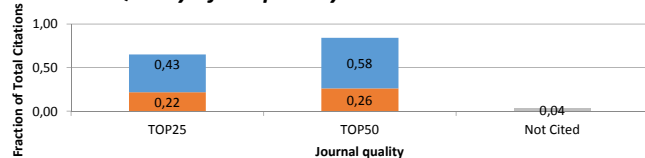
### Quality of Outputs by Journals Ranking



### Quality of Outputs by Number of Citations



### Quality of Outputs by Citation Sources



### Field Structure of Outputs

Field Structure of Outputs	Outputs
CHEMISTRY, APPLIED	42
CHEMISTRY, INORGANIC & NUCLEAR	32
CHEMISTRY, PHYSICAL	28
CHEMISTRY, MULTIDISCIPLINARY	23
POLYMER SCIENCE	7
PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	5
ENGINEERING, CHEMICAL	4
CHEMISTRY, ORGANIC	4
ENVIRONMENTAL SCIENCES	3
MATERIALS SCIENCE, MULTIDISCIPLINARY	3
ENGINEERING, ENVIRONMENTAL	3
CRYSTALLOGRAPHY	2
ELECTROCHEMISTRY	1
ENERGY & FUELS	1
MATERIALS SCIENCE, COATINGS & FILMS	1

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry:** publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile:** number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking:** number of outputs in top decile (1\*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1\*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.

# Evaluation of the Research and Professional Activities of the Institutes of the Czech Academy of Sciences for 2010–2014

## RESULTS OF THE PHASE I. AND BIBLIOMETRIC PARAMETERS

**Institute:** J. Heyrovsky Institute of Physical Chemistry of the CAS, v. v. i.

**Team:** Department of Theoretical Chemistry

**Head:** Doc. Mgr. Jiří Pittner, Dr. rer. nat.

**Total number of outputs :** 115      **Evaluated outputs :** 24 (0)      **Outputs for bibliometry :** 103      **Large collaborations outputs:** 0

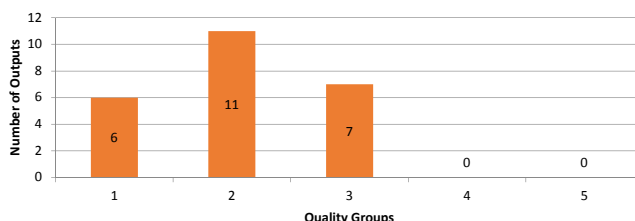
### Quality Groups of Outputs (Results of the Phase I.)

Quality	1	2	3	4	5
Outputs	6	11	7	0	0

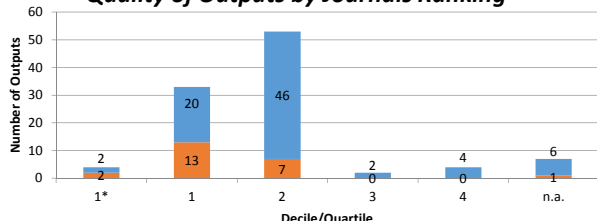
#### Quality Groups:

- (1): Quality that is **world-leading** in terms of originality, significance and rigour.  
 (2): Quality that is **internationally excellent** in terms of originality, significance and rigour but which falls short of the highest standards of excellence.  
 (3): Quality that is **recognized internationally** in terms of originality, significance and rigour.  
 (4): Quality that is **recognized nationally** in terms of originality, significance and rigour.  
 (5): Quality that falls **below the standard** of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

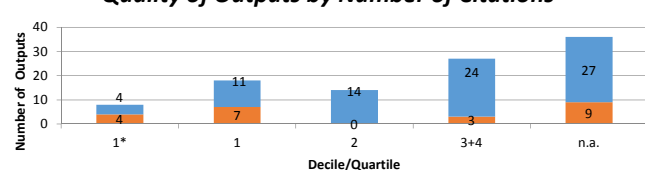
### Quality Profile



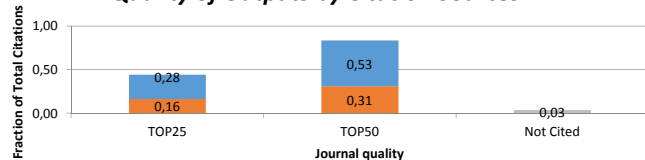
### Quality of Outputs by Journals Ranking



### Quality of Outputs by Number of Citations



### Quality of Outputs by Citation Sources



### Field Structure of Outputs

Field Structure of Outputs	Outputs
CHEMISTRY, PHYSICAL	44
PHYSICS, ATOMIC, MOLECULAR & CHEMICAL	25
OPTICS	7
CHEMISTRY, MULTIDISCIPLINARY	5
BIOCHEMISTRY & MOLECULAR BIOLOGY	5
ENGINEERING, CHEMICAL	4
PHYSICS, CONDENSED MATTER	2
PHYSICS, MULTIDISCIPLINARY	2
PHARMACOLOGY & PHARMACY	1
CHEMISTRY, INORGANIC & NUCLEAR	1
COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS	1
CHEMISTRY, APPLIED	1
BIOPHYSICS	1
PHYSICS, FLUIDS & PLASMAS	1
MULTIDISCIPLINARY SCIENCES	1
NANOSCIENCE & NANOTECHNOLOGY	1
MATERIALS SCIENCE, MULTIDISCIPLINARY	1

**Total number of outputs:** selected types of outputs published in 2010-2014 and registered in the institutional research information system: journal article, monograph, monograph chapter, proceedings paper, patent, utility model, industrial design, prototype, functional specimen, norms and directives, specialized map, realized certified methodology, software, pilot plant, verified technology, plant breed/variety.

**Evaluated outputs:** outputs submitted by the team and evaluated in the Phase I (value in the brackets shows number of outputs submitted by the team but not evaluated in the Phase I).

**Outputs for bibliometry:** publications in 2010-2014 with less than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Large collaborations outputs:** publications in 2010-2014 with more than 30 authors registered in the Web of Science; document type: article, review or proceedings paper.

**Quality Profile:** number of evaluated outputs vs quality groups (5 groups); 'world-leading' quality denotes an absolute standard of quality in each field and subfield; 'world leading', 'internationally' and 'nationally' in this context refer to quality standards; they do not refer to the nature or geographical scope of particular subjects, nor to the focus of research nor its place of dissemination; for example, research which is focused on the subject specific to the Czech Republic might be of 'world leading' standard, on the contrary, work with an international focus might not be of 'world leading, internationally excellent or internationally recognized' standard.

**Quality of Outputs by Journals Ranking:** number of outputs in top decile (1\*) and quartiles (1-4) by AIS of journals; n. a. - outputs in journals without AIS; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Number of Citations:** number of outputs in the top decile (1\*) and in quartiles (1, 2, 3+4) of the list of outputs ordered by the number of citations; n. a. - the number of outputs in the field is low and/or the number of citations is not sufficient for relevant judgement; if the output is assigned to more than one field, the mean value of quartile is taken (values from 0,1 to 0,5 rounded down); orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Quality of Outputs by Citation Sources:** fraction of citations of all outputs in the top quartile (TOP25) or the top half (TOP50) of list of journals ordered by AIS; fraction of "not cited" outputs is added; orange: outputs submitted by the team to the Evaluation, blue: other outputs by the team.

**Field Structure of Outputs:** number of outputs of the team in different fields; if the output is assigned to more than one field, the field where the publication performs best (assessed by Quality of Outputs by Journals Ranking) is taken; the table shows up to 30 fields.