Yudin Evgeniy

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Education

September 2003 - June 2007: Moscow Institute of Physics and Technology (State University), Applied Mathematics and Physics, BS (diploma with honors)

Theme of the diploma: 'The study of electric discharge chemical action in an inhomogeneous medium' (prepared at the Kurchatov Institute)

September 2007- June 2009: Moscow Institute of Physics and Technology (State University), Applied Mechanics and Reservoir Engineering, MS (diploma with honors)

Theme of the dissertation: 'The use of multilayer well killing data to estimate reservoir pressure' (prepared at the Rosneft Corporate Scientific Center)

October 2009 March 2014: Institute of Geosphere Dynamics (IDG RAS), Geophysics and Geophysical Methods of Mineral Exploration, PhD (physics and math sciences)

Theme of the dissertation: 'Mathematical Simulation of Liquid Flow through Inhomogeneous Porous Mediums for the Monitoring and Planning of Field Development' (prepared at the Moscow Institute of Physics and Technology)

Key Skills:

- Reservoir development
- Mathematics simulation
- Applied math and physics

Work Experience

September 2007- September 2009: Researcher at the Rosneft Corporate Scientific Center, JSC Rosneft, Moscow

- Reservoir field development
- Welltest analysis
- Well killing design

I was responsible for developing analytic methods to describe multiwell system performance in heterogeneous mutilayer reservoirs. All algorithms were implemented in VBA. The developed algorithms and software allowed us to build more precise reservoir pressure maps, and design welltest and wellkilling in heterogeneous and layered reservoirs. With the help of algorithms the cause of a reduction in well production at the Priobskoe field was discovered. This then was taken into account in oil production planning.

October 2009 - December 2013 – Head of the Simulation team at LLC Yuganskneftegas (subsidiary of JSC Rosneft), Nefteyugansk, Khanti-Mansiysky Autonomous District

- Planning, monitoring and analyzing development drilling (including planning of drilling rating)
- Calculating and forecasting the main indicators of development (well rates, production decline rates, flooding system performance etc.)
- Monitoring and planning production and injection levels
- 3D dynamic modeling
- Well placement
- Working with institutes on software maintenance and development as well as R&D
- Constructing geological maps

While working at Yuganskneftegas I have developed a number of engineering approaches in the development of low-permeability reservoirs:

- Approaches to the planning of drilling rating in low-permeability reservoirs for wells with different types of completion
- Identification of heterogeneous reservoir parameters using field data
- Automatic analysis of field data correctness
- Determination of the optimal parameters of the flooding
- Forecast of the workover effect on wells with different types of completion (including multilayer wells)

All the methodologies are implemented using commercial software and applications. Based on the results of the described algorithms, decisions on the determining of optimal parameters of development have been adopted (flooding pattern, well spacing, type of completion) in many fields in Western Siberia - Priobskoe, Sredne-Ugutskoe, Zapadno-Ugutskoe, Ombinskoe, Prirazlomnoe, Pravdinskoe, and Vostochno-Surgutskoe. These approaches were all published in industry journals and magazines (including SPE 135820, SPE 149924, SPE 161969, SPE 166889 and etc.), and are available on request.

January 2014-October 2018: Deputy Head of Field Development Department, JSC "Zarubezhneft", Moscow

- Planning and monitoring all stages of field development in "Zarubezhneft": carbonate fields in the Timan-Pechora region, offshore Vietnam fields, heavy oil belt fields of the Republic of Cuba, fields of the Ural-Volga Region
- Managing specific industry software implementation
- Well placement
- 3D hydrodynamic modeling
- Working with institutes on laboratory studies and R&D

While working at Zarubezhneft I implemented the integrated information system for planning and monitoring production and development. I also developed new approaches for production planning and workover effects forecast. All subsidiaries of Zarubezhneft use my algorithms in the work process at the development planning stage (see related papers SPE 176690, SPE 176699, SPE 181903). As a project leader, I contributed to the development and implementation of a number of original commercial software products: a non-isothermal filtration simulator, a module for analyzing the performance of multi-well systems in heterogeneous reservoirs with faults, a module for analyzing the performance of wells with various completion in heterogeneous reservoirs (see SPE 191582, SPE 191608). I am an internal lecturer at the School of Petroleum Engineering. I also developed three original intensive advanced training courses: "Flooding", "Production and Field Measurement Analysis", "Engineering Methods in Reservoir Engineering". I was responsible for organization and mentoring of internships for students at leading technical universities at Zarubezhneft JSC.

October 2018 - January 2020 LLC « Gazpromneft STC », head of the Geology and Reservoir Engineering department

- The department's activities organization and allocation
- Annual task planning, decision administration for Geology and Development department operation at the fields of Gazpromneft
- Investment Projects' expertise, participation in M&A sessions with potential business partners
- Preparation of additional proposals for development drilling and geological and engineering operations' programs
- Expertise of the production program for joint non-operator assets (Tomskneft VNK, since 2020 LLC Slavneft-Krasnoyarskneftegaz)

During this period, a new field monitoring team was formed for non-operator assets Tomskneft VNK, Krasnoyarskneftegaz. New digital tools have been developed and implemented for the geological potential analysis of production, considering the influence of infrastructure: "technological mode 2.0", a module for calculating production considering infrastructure, automatic algorithms analysis of high-frequency telemetry data. The team was updated and strengthened, taking into account the refocusing of the activities of the Office / Department. (For more information, see related papers SPE 196816, SPE 196852, SPE-201884, SPE 201955, etc.).

- The investment program management (est. investment volume 7 billion rubles): from the targets' allocation to critical design review at the investment Committee
- Internal (~200 people) and external (~150 people) development teams Management
- Methodological project monitoring of the development process of 20 groups of tools for the entire oil production chain coverage: from field gathering system and validation to assessment of potential for optimization of technological modes and the optimal work plan scheduling
- Transformation and development of 10 groups of business products, processes are developed up to 3d and 4th level

During this period, the line of Russian equivalent digital production management tools were implemented: tool for calculation of well models and artificial lift management, tools for operational and technological potential management, the first Russian package for integrated modeling, virtual flow metering algorithms and other approaches for handling raw data. For faster integration, a new approach to the digital tools issuing was developed, which made it possible to reduce the "approval-pilot-commercial operation" cycle by 3 times. The estimated total revenue from the integration of digital tools is more than 14 billion rubles by 2030, of which 2.5 billion rubles. are actual income. (For more information, see related papers SPE 207076, SPE 206652, SPE 206553, SPE 206519, SPE 212065, SPE 212086, SPE 212116, SPE 212118, and others, a full list of registration certificates and patents is available upon request.)

Languages

Russian (native), English (upper intermediate/C1)

Interests

I enjoy all types of fitness activities, especially swimming. I like to travel and use every opportunity to visit interesting places. I like reading specific industry papers as well as fiction (Russian and foreign classics). I am interested in western philosophy.