

入口紀男業績リスト

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これまで私の微力を支えてくださいました皆さまに感謝申し上げます。

入口紀男

1. 教育上の主な業績

- 熊本大学大学院社会文化科学研究科教授システム学専攻博士前期課程を兼務して情報ネットワーク技術と知的財産権、民法、刑法等を総合した新しい人文社会科学科目「ネットワーク上の知的財産権及び私権」を創設した。(2006年)
- 熊本大学大学院自然科学研究科情報電気電子工学専攻博士後期課程を兼務して研究を指導した博士(工学)の学位取得者
 - ・ 水内宣夫『脊髄神経の画像化における拡散強調を用いた非侵襲的 *in vivo* 磁気共鳴映像法に関する研究』(2009年)
 - ・ 丸山克也『体幹部の磁気共鳴アンギオグラフィとスペクトロスコピーにおける脂肪抑制の応用に関する研究』(2009年)
 - ・ 諸井貴『磁気共鳴画像装置を用いた生体における上腹部等方形ボクセル撮像の高画質化に関する研究』(2009年)
 - ・ 竹内道広『磁気共鳴法を用いたタンパク質線維の配向と周囲の水の性質に関する研究』(2010年)

2. 研究上の主な業績

- 1986年に2.0テスラ(86MHz)臨床用MRIを開発した(世界最初)。

それまで 1.0 テスラ (43MHz) を超えると電波は人体内部には到達しない (断層画像は撮れない) ことがイギリスで理論的に証明されていた。

- 1987 年に MRI で人体の炭素 13 分布画像、リン 31 分布画像を撮像した (世界最初)。それまで炭素 13 やリン 31 は感度が低すぎて画像化は不可能と考えられていた。
- 1995 年に核磁気共鳴 (NMR) の検出感度を既知定数のみの等式で表した。それまでは未知の定数を含む比例式で表されていた。
- 1995 年に原子核 (107 種類) の物理定数表 (磁気共鳴感度) を改定した。いずれの原子核の検出感度もそれまで低いと考えられていた。

3. 地域貢献上の主な業績

- 有機水銀中毒がロンドンで 1865 年 (慶応元年) に発生していたことと、また、酢酸アセトアルデヒド製造工程における有機水銀の副生がアメリカで 1921 年 (大正 10 年) から知られていて日本に伝わっていたことを明らかにした。

4. 著書 (books & chapters) (新しい順)

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2. 入口紀男, “必要不可欠な知的財産権.” 大森不二雄編 『IT 時代の教育プロ養成戦略』 東信堂 (2008 年)
3. 入口紀男 『メチル水銀を水俣湾に流す』 日本評論社 (2008 年)
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- Emerging Technologies in Progress.” P. Oeberg ed. *Biomagnetic Imaging* Wiley-VCH, Weinheim 2004
5. N. Iriguchi, *Protection of Asian Intellectual Property Rights in the Network Society* JICA-Net CD-ROM 2004
 6. S. Ueno and N. Iriguchi, “Principle and Horizons of MR Imaging.” James. C. Lin ed., *Advances in Electromagnetic Fields in Living Systems* Plenum Press, New York 2000
 7. T. Yamamoto, N. Iriguchi, and T. Miyazaki, “Basic Principles of MRS.” T. Fujimoto ed., *MRS of the Brain and Neurological Disorders* CRC Press, Boca Raton 2000
 8. (学位論文) 入口紀男 『生体組織の多核種磁気共鳴映像法ならびに分光法の検出感度に関する研究』 東京大学大学院工学系研究科 (乙12585号) (1995年)

5. 専門雑誌に掲載された論文 (新しい順)

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4. M. Takeuchi, S. Ueno, T. Usagawa, T. Sueyoshi, M. Sekino, and N. Iriguchi, “Measurement of T2 Relaxation Time and Fiber Orientation Degree of Collagen Gel Exposed to a Magnetic Field.” *INFORMATION* 13(1): 229-234, 2010
 5. M. Sekino, H. Ohsaki, S. Yamaguchi-Sekino, N. Iriguchi, and S. Ueno, “Low-Frequency Conductivity Tensor of Rat Brain Tissues Inferred from Diffusion MRI.” *Bioelectromagnetics* 30(6): 489-499 2009
 6. N. Mizuuchi, K. Maruyama, T. Moroi, C. Imura, I. Isobe, T. Sueyoshi, T. Usagawa, and N. Iriguchi, “Visualizing Nerve Roots of the Spinal Cord Using a 3 T MRI without Contrast Agents.” *INFORMATION* 12(3): 697-708, 2009
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10. 久保田真一郎, 杉谷賢一, 武藏泰雄, 中野裕司, 永井孝幸, 入口紀男, 右田雅裕, 喜多敏博, 松葉龍一, 辻一隆, 島本勝, 木田健, 宇佐川毅, “パソコン実習型講義におけるプレゼンスタイプ出席管理システム.” 学術情報処理研究 13(1): 24-31, 2009
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8. 海外での依頼講演 (新しい順)

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12. その他の活動

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6. 熊本大学文芸サークル支援 (2011 年)



入口紀男略歴

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