

第40回放射化学討論会

第40回記念・放射能発見100年記念
木村健二郎先生ご生誕100年記念

記念講演

10月23日(水) 14:00 - 17:55

[C会場 (生物科学研究棟鈴木梅太郎ホール)]

放射化学領域における木村健二郎博士の業績

(理研名誉研究員・東京大名誉教授) 斎藤信房

木村健二郎 — 時代と生涯

(青山学院大理工) 木村 幹

ビキニの灰から宇宙核化学へ

(東京大名誉教授) 本田雅健

不足当量法の創始と発展

(石巻専修大) 鈴木信男

NEETとは何か？

(神戸女子大) 音在清輝

特別講演

10月22日(火) 13:40 - 14:30

[C会場 (生物科学研究棟鈴木梅太郎ホール)]

RIビームファクトリーでのRI新利用

(理研) 谷畑勇夫

10月24日(木) 13:40 - 14:30

[C会場 (生物科学研究棟鈴木梅太郎ホール)]

Current Status and Progresses of Radiochemistry in China

(Peking Univ.) Yuanfang Liu

プログラム

一般講演 20分 (講演 15分、討論 5分)
ポスター発表に付随する短時間口頭発表 2分
○印は連名の場合の登壇者

第1日 10月22日(火)

午前(9:15 - 12:25)

一般講演

[A会場(仁科記念棟仁科ホール)]

[核反応]

座長 篠原 厚 (9:15 - 10:15)

- 1A01 アクチノイドの低エネルギー核分裂における二つの変形経路と質量分割モードとの関連
(原研・都立大理¹・東大理²・東北大核理研³・新潟大理⁴・金沢大理⁵・阪大理⁶・Hallym Univ.⁷) ○永目論一郎・西中一朗・塚田和明・大浦泰嗣・市川進一・池添 博・趙 宇亮¹・末木啓介¹・中原弘道¹・谷川勝至²・大槻 勤³・工藤久昭⁴・浜島靖典⁵・高宮幸一⁶・中西 潔⁶・井上貴和⁶・馬場 宏⁶・Y.H. Chung⁷
- 1A02 $^{232}\text{Th} + p$ における核分裂生成物の角運動量
(新潟大理・東北大サイクロ*) ○後藤真一・安田健一郎・加治大哉・工藤久昭・藤岡 学*・篠塚 勉*・藤田正広*・渡部あい*
- 1A03 Complete and Incomplete fusion fission at the energy range near- and sub-coulomb barrier
(都立大理¹・原研²・東大理³) ○趙 宇亮¹・末木啓介¹・中原弘道¹・永目論一郎²・西中一朗²・塚田和明²・谷川勝至³

座長 三浦太一 (10:15 - 11:15)

- 1A04 制動放射による ^{238}U 核分裂と核相転移
(阪大理・原研・金沢大理・東北大核理研) ○馬場 宏・高橋成人・横山明彦・山口貴行・矢野大作・斎藤 直・白数訓子・浜島靖典・大槻 勤・梶本和義
- 1A05 $^{238}\text{U} + ^{12}\text{C}$ 反応系の速い核分裂機構と質量拡散過程の二重性
(阪大理) ○横山明彦・馬場 宏・高橋成人・斎藤 直
- 1A06 $^{235}\text{U}(n_{th}, f)$ における観測量の相関について
(阪大理・京大炉) ○高宮幸一・井上貴和・横山明彦・高橋成人・斎藤 直・馬場 宏・中込良広

[隕石・測定・原子炉]

座長 斎藤 直 (11:25 - 12:25)

- 1A07 つくば隕石中の宇宙線生成核種
(金沢大学LLRL・国立科学博物館^(*)) ○小村和久・井上睦夫・山崎誠一・村田祥全・米田成一^(*)
- 1A08 ガンマ線エネルギー精密測定におよぼす電子ノイズ波形のひずみ
(熊本大工) 岸川俊明
- 1A09 一化学者から見た高速増殖炉
(名大理) 古川路明

[B会場 (レーザー研究棟大河内記念ホール)]

[即発 γ 線分析]

座長 海老原 充 (9:15 -10:15)

- 1B01 中性子即発 γ 線分析におけるマトリックス水素による中性子散乱の影響
(原研東海) ○松江秀明・米沢仲四郎
- 1B02 中性子即発ガンマ線分析法による岩石及び環境標準物質中のホウ素の定量
(原研東海) ○Ruska Prima Putra・Wichlan Ratanatongchai・米沢仲四郎・松江秀明・
間柄正明
- 1B03 即発 γ 線分析法による陶磁器の主成分元素の定量
(都立大理・慶大文) ○末木啓介・金子 護・佐藤 渉・中原弘道・富沢 威・森本伊知郎

[ルミネッセンス]

座長 酒井陽一 (10:15 -10:55)

- 1B04 白色鉱物粒子試料からの放射線誘起ルミネッセンス特性とその利用
(新潟大理) ○須貝紀之・田中美紀・橋本哲夫
- 1B05 白色鉱物からのルミネッセンス特性を用いた被爆瓦の被熱温度及び被曝線量の見積り
(新潟大理) 橋本哲夫・○片山 肇・兼田朋廣

座長 米沢仲四郎 (11:05 -11:45)

- 1B06 土器や窯跡・遺物等から観察される熱ルミネッセンス測定による熱履歴推定と年代評価
(新潟大理) 橋本哲夫・○坂上央存・手代木泰浩
- 1B07 天然鉱物薄片から観察される光励起ルミネッセンスの二次元パターン測定について
(新潟大理) ○有村俊彦・能登屋信・橋本哲夫

[ラジオルミノグラフィー・定量]

座長 橋本哲夫 (11:45 -12:25)

- 1B08 ラジオルミノグラフィーを用いる半導体ケイ素表面付近の銅の放射化分析
(*ピュアレックス・**立教原研) ○野崎 正*・村岡久志*・戸村健児**
- 1B09 鉛中のラジウムの定量に関する研究
(武蔵工大原研・*東北大学金研) ○森 敦史・鈴木章悟・岡田往子・平井昭司・*三頭聰明

[C会場 (生物科学研究棟鈴木梅太郎ホール)]

[トレーサー・マルチトレーサー・生体]

座長 天野良平 (9:15 -10:15)

- 1C01 放射線防御酵素SOD(Superoxide dismutase)の酵素活性とその金属含有量について
(共立薬大) ○村瀬裕子・村上 勲・本間義夫・井口陽世・渋谷美聡
- 1C02 赤血球におけるK, Rbの取り込みに関する研究
(北里大獣医) 夏堀雅宏・○小坂繁聡・伊藤伸彦
- 1C03 生体微量元素研究におけるマルチトレーサー法の展開
(理研¹・東大理²) ○榎本秀一¹・尾崎卓郎^{1,2}・前田はるか¹・安部静子¹・安部文敏¹

座長 夏堀雅宏 (10:15 -11:15)

- 1C04 正常ラットにおける Mn, Fe, Zn, Se の生体内挙動：月齢による差異の検討
(金沢大学医・理研) ○大石茂雄・高藤里江・福本紀子・天野良平・安東 醇・榎本秀一・
安部文敏
- 1C05 異なる酸素濃度の環境で飼育したマウスにおけるマルチトレーサの生体内挙動
(金沢大学医・理研) ○天野良平・大石茂雄・榎本秀一・安部文敏

- 1C06 マルチトレーサー法を用いた微量元素の各種血清蛋白質への結合
 (1)昭和薬大・(2)理研)○外角直樹⁽¹⁾・蛭沼利江子⁽¹⁾・遠藤和豊⁽¹⁾・榎本秀一⁽²⁾・安部静子⁽²⁾・
 安部文敏⁽²⁾
 座長 遠藤和豊 (11:25 -12:25)
- 1C07 マルチトレーサー法による植物の元素取り込みに関する研究
 (1)東大アイソ総セ・2)理研・3)東大理)○尾崎卓郎^{1,2}・榎本秀一²・葉袋佳孝³・安部静子²・安部
 文敏²・巻出義紘¹
- 1C08 シダ類葉組織における希土類元素の集積パターン
 (京大原子炉・京大農)○高田實彌・隅野照家・田中愛子・西村和雄・赤星光彦
- 1C09 遷移金属によるDNA鎖切断とそれに対する茶カテキンの影響 -DNA溶液中における鉄エピガ
 ロカテキンガレート錯体の挙動-
 (静岡大理・* 静岡県大)○平澤みゆき・吉岡潤江・吉岡 寿*・長谷川園彦

<昼休み 12:25 - 13:40>

午後 (13:40 - 17:40)

特別講演

[C会場 (生物科学研究棟鈴木梅太郎ホール)]

座長 古川路明 (13:40 - 14:30)

- 1I01 RIビームファクトリーでのRI新利用 (理研) 谷畑勇夫

ポスターセッション

[短時間口頭発表：C会場 (生物科学研究棟鈴木梅太郎ホール)] (14:40 - 16:10)

[ポスター発表：P会場 (生物科学研究棟2・3階ロビー)] (16:10 - 17:40)

座長 坂本 浩 (14:40 - 15:10)

- 1P01 アクチノイドの核分裂における二つの質量分割モードと放出中性子の関連
 (原研¹・都立大理²・東大理³)○西中一朗¹・永目諭一郎¹・塚田和明¹・大浦泰嗣¹・市川進一¹・
 池添 博¹・趙 宇亮²・末木啓介²・中原弘道²・谷川勝至³
- 1P02 ²⁵²Cf自発核分裂の角度相関と質量-運動エネルギーの2次元解析
 (阪大理・京大炉)○井上貴和・高宮幸一・横山明彦・高橋成人・斎藤 直・馬場 宏・
 中込良広
- 1P03 親子関係を利用したγ線放出確率測定を試み
 (阪大理・京大原子炉)○荒木宏一・真田 潤・横山明彦・斎藤 直・馬場 宏・西川
 佐太郎・森山裕丈
- 1P04 高エネルギー重イオン核反応C+Au系の運動量移行
 (阪大理・名大理・理研・放医研)○森本真哉・荒木宏一・真田 潤・井上貴和・向 和彦・
 横山明彦・斎藤 直・馬場 宏・大柴知久・室山俊浩・篠原 厚・大久保嘉高・柴田貞夫
- 1P05 高エネルギー¹²Cイオンによる標的核類似生成物の定量
 (阪大理・放医研・名大理)○横山明彦・森本真哉・井上貴和・真田 潤・荒木宏一・斎藤
 直・馬場 宏・柴田貞夫・篠原 厚・室山俊浩
- 1P06 光磁性材料コバルト-鉄シアノ錯体のメスパウアー分光法による評価
 (東大工¹・神奈川科技ア²・理研³)○柴長泰明¹・佐藤 治²・彌田智一²・小林義男³・安部
 文敏³・橋本和仁^{1,2}・藤嶋 昭¹

- 1P07 液体アンモニア中での正ミュオンの挙動
(東大理) ○久保謙哉・西山樟生
- 1P08 高分子材料へのガス吸着機構の陽電子消滅による研究
(東大原総セ・山口大工) ○伊藤泰男・Mohamed Hamdy・田中一宏・岡本健一
- 1P09 シリコンウエハ上のホウ素薄膜から生成する⁷Liの即発 γ 線線形のシミュレーション
(大同工大・東大理) ○酒井陽一・久保謙哉
- 1P10 金属中にイオン注入された¹³³Xeのメスバウア分光(II)
(信州大教・高エネ研^A・原研^B・静岡大理^C) ○石井寛子・田中栄司・村松久和・三浦太一^A・小泉光生^B・長 明彦^B・関根俊明^B・矢永誠人^C
- 1P11 メスバウア分光法によるEu-Nb複合酸化物の研究 一焼成条件とメスバウアパラメータとの相関
(原研) ○正木信行・中田正美・佐伯正克・中村彰夫
- 1P12 CdZnTe検出器のメスバウアー測定への適用
(東大アイソトープ総合セ・東大工*) ○野川憲夫・野村貴美*・巻出義紘
座 長 工藤博司 (15:10 - 15:40)
- 1P13 理研加速器を用いたインビームメスバウアー分光
(理研・静岡理工科大*・大阪大**) ○小林義男・吉田 豊*・行平憲一*・早川一生*・中村 仁・八木栄一・那須三郎**・安部文敏
- 1P14 YSr₂Cu_{3-x}Fe_xO₇の磁氣的性質
(電通大電子物性・早大理工^A・理研^B) ○不破敏博・池田 直^A・中村 仁^B・岡田卓也^B・近 桂一郎^A・山田修義
- 1P15 銅代謝異常LECラットにおけるマルチトレーサの生体内挙動 -ゲルろ過法によるアプローチ
(金沢大学医・理研) ○大石茂雄・瀬戸小百合・高田忠徳・天野良平・安東 醇・榎本秀一・安部文敏
- 1P16 ビタミンD過剰及び欠乏ラットにおける各種微量元素のダイナミクス
(昭和薬大・理研*) ○姪沼利江子・岡本洋一・外角直樹・遠藤和豊・榎本秀一*・安部静子*・安部文敏*
- 1P17 アルミニウム錯体を投与した動物におけるアルミニウムの体内分布
(*京都薬大・**京大原子炉) ○日野唯行*・藤本盛揮*・増山伸幸*・岡 茂範*・田和理市*・桜井 弘*・高田實彌**・松下緑治**
- 1P18 ニザダイ及びメジナの歯に濃集した鉄の状態分析
(東大院総合¹・徳島大総合²・放医研³) ○松尾基之¹・沼子千弥²・久野章仁¹・石井紀明³
- 1P19 中性子放射化分析法による汚染米中の微量元素の定量
(静岡大理・台湾中原大学*・立教大原研**) ○滝口幸次・圖師丈裕・吉岡潤江・長谷川園彦・黄 金旺*・戸村健児**
- 1P20 トリチウム水中におけるDNA鎖切断に対する茶カテキン類の防御機構(その2) -DNA分子へのEGCgのインターカレーション-
(静岡大理・静岡県立大環境*) ○黒崎 拓・吉岡潤江・吉岡 寿*・長谷川園彦
- 1P21 加速器質量分析計による古文書の¹⁴C年代測定
(名大理¹・名大年代センター²) ○小田寛貴¹・中村俊夫²・古川路明¹
- 1P22 書籍に含まれる放射能 (II)
(東大理) 小橋浅哉
- 1P24 環境・医学トレーサー用炭素標識脂肪酸のマロン酸合成とアセト酢酸合成
(*北里大医療衛生・**ピュアレックス) ○小川幸次*・野崎 正**

座長 竹田満洲雄 (15:40 - 16:10)

- 1P25 コマツナにおける放射性核種の吸収・移行のマルチトレーサー法による研究
(理研・放医研) ○西沢 諭・川島康子・前田はるか・榎本秀一・尾崎卓郎・篠永妙子・安部静子・保田浩志・内田滋夫
- 1P26 マルチトレーサー法によるフミン酸及びポリカルボン酸と各種金属イオンとの相互作用の解明
(東大理[#]・理研^{##}・東大RI総合セ^{###}) ○高橋嘉夫[#]・薬袋佳孝[#]・安部静子^{##}・安部文敏^{##}・巻出義紘^{###}
- 1P27 大容量Ge半導体検出器および低エネルギー測定用Ge半導体検出器の検出効率に関する考察
(新潟大理) ○加治大哉・後藤真一・工藤久昭
- 1P28 熱中性子放射化分析による標準鉄鋼試料中のマンガンとクロムの定量
(立教大原研) 戸村健児・戸室裕行
- 1P29 元素分析による初期須恵器の伝播に関する研究
(¹奈教大・²京大炉) ○三辻利一¹⁾・高場慎太郎¹⁾・武内孝之²⁾・中野幸廣²⁾
- 1P30 古代ガラスの原子炉中性子即発ガンマ線分析
(慶大文・原研東海^{*}・東大理^{**}) ○富沢 威・米沢仲四郎^{*}・薬袋佳孝^{**}
- 1P31 k_0 法による分オーダーの短半減期核種を利用する中性子放射化分析の基礎検討
(原研東海) ○米沢仲四郎・Ruska Prima Putra・松江秀明
- 1P32 石英の熱ルミネッセンス特性へのAl不純物と-OH基濃度の影響
(新潟大理) ○橋本哲夫・有村俊彦・高橋英史
- 1P33 多核種を含む放射化金属の加熱により発生する放射性エアロゾル
(高エネ研) ○沖 雄一・沼尻正晴・鈴木健訓・三浦太一・神田征夫・近藤健次郎
- 1P34 水晶小薄片からの熱ルミネッセンス発光特性と熱処理による変化
(新潟大理) ○高橋英史・橋本哲夫
- 1P35 冷却CCDを使用したガンマカメラの制作
(理研) ○岡本洋一・榎本秀一・平嶋龍介・安部文敏
- 1P36 水溶性金属ポルフィリン錯体イオン会合系固相における反跳に伴う錯生成と構造因子の関係
(筑波大化) 荏司 準

核化学分科会：広沢クラブ2階会議室 (18:00 - 20:00)

原子核プローブの化学分科会：事務棟第2会議室 (18:00 - 20:00)

放射化分析分科会：生物科学研究棟3階大セミナー室 (18:00 - 20:00)

第2日 10月23日(水)

午前(9:00 - 12:30)

一般講演

[A会場(仁科記念棟仁科ホール)]

[核反応]

座長 永目諭一郎 (9:00 - 10:00)

- 2A01 中高エネルギー光子によるフラグメンテーション生成核
(金沢大理¹⁾・京大原子炉²⁾・追手門学院大経³⁾・名古屋大理⁴⁾・東大核研⁵⁾・日大文理⁶⁾・東大原七⁷⁾ ○松村 宏¹⁾・沖崎昌平¹⁾・土田早苗¹⁾・鷺山幸信¹⁾・羽場宏光¹⁾・宮本ユタカ¹⁾・坂本 浩¹⁾・柴田誠一²⁾・藤原一郎³⁾・古川路明⁴⁾・今村峯雄⁵⁾・永井尚生⁶⁾・小林紘一⁷⁾

2A02 Catcher foil法によるCu光核破砕生成核のエネルギー測定
(金沢大理¹⁾・京大原子炉²⁾・追手門学院大³⁾・名古屋大理⁴⁾)○羽場宏光¹⁾・松村 宏¹⁾・宮本ユタカ¹⁾・坂本 浩¹⁾・柴田誠一²⁾・藤原一郎³⁾・古川路明⁴⁾

2A03 Cuの中高エネルギー重イオン核反応における残留核への運動量移行
(名大理^a・阪大理^b・理研^c・放医研^d・愛知医大^e)○篠原 厚^a・室山俊浩^a・横山明彦^b・森本真哉^b・斎藤 直^b・大久保嘉高^c・柴田貞夫^d・小島貞男^e・安部文敏^c・馬場 宏^b・古川路明^a

[新核種・核準位]

座 長 工藤久昭 (10:00 - 11:00)

2A04 アクチノイドの陽子誘起核分裂で生成する未知中性子過剰ランタノイド核種の探索
(原研アイソトープ部・名大工*)○塚田和明・市川進一・浅井雅人*・長 明彦・小島康明*・永目論一郎・山本 洋*・河出 清*・大浦泰嗣・飯村秀紀・西中一朗・初川雄一

2A05 原研ガスジェット-ISOLを利用した新アクチノイド核種の探索
(都立大理・原研アイソトープ部・名大工)○大山健志・塚田和明・市川進一・大浦泰嗣・浅井雅人・広瀬知明・初川雄一・畑 健太郎・西中一朗・永目論一郎・趙 宇亮・末木啓介・中原弘道・山本 洋・河出 清

2A06 γ - γ 角度相関測定によるA=130近傍の偶Ba核励起準位の研究
(原研・名大工)○長 明彦・浅井雅人・関根俊明・小泉光生・小島康明・柴田理尋・山本洋・河出 清

[放射化分析]

座 長 葉袋佳孝 (11:10 - 11:50)

2A07 放射化学的中性子放射化分析法による地質学試料中の極微量白金族元素の定量
(都立大理)○内野智功・孔 屏・海老原 充・中原弘道

2A08 機器中性子放射化分析によるストロンチウム-バリウム-ニオブ酸中のロジウムの定量
(NTT礎総研・NTT-AI⁽¹⁾・NTT技協セ⁽²⁾・NTT光工研⁽³⁾)加藤正明・○大録 正⁽¹⁾・米沢洋樹⁽²⁾・八木生剛⁽³⁾

座 長 柴田誠一 (11:50 - 12:30)

2A09 COMPARISON OF NEUTRON ACTIVATION ANALYSIS FOR PLATINUM GROUP ELEMENTS WITH OTHER TECHNIQUES

(Inst. High Energy Phys./Lab. Nucl. Anal.) Chifang CHAI

2A10 隕石中の希土類元素の定量：放射化学的中性子放射化分析法と結合誘導プラズマ質量分析法の比較

(都立大理)○篠塚一典・海老原 充・中原弘道

[B会場(レーザー研究棟大河内記念ホール)]

[メスbauer分光]

座 長 中島 覚 (9:00 - 10:00)

2B01 擬クラウンエーテル環を含む鉄(III)錯体の合成と錯体の電子状態
(九大理・九大RI*)○速水真也・野見山修一・廣瀬重之・矢野弥生・前田米藏・杉原真司*

2B02 酸化鉄を含むアルミン酸塩ガラスの熱処理により析出した磁性微粒子のメスbauerスペクトル
(九大理・お茶の水大理*)西田哲明・○久富木志郎・柴田守啓・前田米藏・玉置豊美*

2B03 サレン錯体と $K_3Fe(CN)_6$ の反応で得られる磁性体のメスbauerスペクトル(2)
(* 生命工研** 九大理)○飯島誠一郎*・水谷文雄*・宮坂 等**・松本尚英**・大川尚士**

- 座長 片田元己 (10:00 - 10:40)
- 2B04 アザフェロセン類のメスbauer一分光法による研究
(広島大理・広島大RIセ*・甲南大理**・京大原子炉***)
○北尾貴彦・木村維久代・中島 覚*・酒井 宏**・前田 豊***
- 2B05 メスbauer一分光法によるメタロセン包接体の動的過程の研究
(広島大理・広島大RIセ*・甲南大理**) 中下光頼・○小松弘明・中島 覚*・酒井 宏**
- 座長 西田哲明 (10:50 - 11:30)
- 2B06 FePS₃層間化合物の磁性とメスbauerアスペクトル
(甲南大理・広島大RI*) ○酒井 宏・山崎隆志・重松利彦・中島 覚*
- 2B07 希土類-鉄-ジイミン錯体のメスbauer一分光学的研究
(都立大理) ○名和達彦・熊谷 等・北川 進・片田元己
- 座長 村松久和 (11:30 - 12:30)
- 2B08 エルビウム(III)化合物の¹⁶⁶Erメスbauerアスペクトル
(東邦大理) ○竹田満洲雄・南波 洋・高橋 正
- 2B09 Sb-Fe結合を有するhypervalentな有機アンチモン化合物の¹²¹Sbおよび⁵⁷Feメスbauerアスペクトル
(東邦大理・広島大理*) ○前田正樹・高橋 正・竹田満洲雄・脇阪幸也*・山本陽介*・秋葉 欣哉*
- 2B10 環状有機アンチモン(III)化合物の¹²¹Sbメスbauerアスペクトル
(東邦大理・Johannes Gutenberg大*) ○前田正樹・高橋 正・竹田満洲雄・Elmer Braeu*・Martin Draeger*

[C会場(生物科学研究棟鈴木梅太郎ホール)]

[環境・地球]

- 座長 高田實彌 (9:00 - 9:40)
- 2C01 中性子誘起即発γ線分析法および機器中性子放射化分析法による河口域底質の多元素定量
(東大院総合¹・原研²・東大原総セ³) ○久野章仁¹・松尾基之¹・米沢仲四郎²・松江秀明²・澤幡浩之³
- 2C02 環境土壌および生葉中の¹³⁷Csの分布
(大阪薬大) ○山沖留実・木村捷二郎
- 座長 斎藤裕子 (9:40 - 10:40)
- 2C03 環境試料の光量子放射化分析へのKURRI-LINACの適用
(東北大・核理研*・金沢大理**) ○榎本和義*・坂本 浩**・宮本ユタカ**・J. H. Zaldi**・梶川晶子**・羽場宏光**
- 2C04 地球化学的試料並びに植物試料の中性子および光量子放射化分析 一特に妨害核反応の寄与について—
(金沢大理*・東北大核理研**) ○宮本ユタカ*・J. H. Zaldi*・梶川晶子*・羽場宏光*・榎本和義**・坂本 浩*
- 2C05 常緑樹林における天然放射性核種の挙動メカニズム
(九大理・九大農・九大RIセ) ○馬場智子・吉田明日香・田川祐子・井倉洋二・杉原真司・大崎 進・前田米藏
- 座長 榎本和義 (10:50 - 11:50)
- 2C06 チェルノブイル周辺環境の森林土壌における放射性核種の存在状態
(¹青山学院理工・²原研東海・³放計協) ○渡邊美紀¹・木村 幹¹・天野 光²・上野 隆²・松永 武²・柳瀬信之²・小沼義一³
- 2C07 中国・吐魯番盆地における⁹⁰Srおよび¹³⁷Csの分布・挙動

(青学大理工・理研**) 斎藤裕子・高崎雅子・新城則子・川島晴海・木村 幹・矢吹
貞代**

- 2C08 深海底堆積物中の貴金属元素の分布・挙動
(青学大理工・海洋科学技セ*) ○佐藤真丈・古里直久・斎藤裕子・木村 幹・本多牧生*・
日下部正志*

座 長 松尾基之 (11:50 - 12:30)

- 2C09 琵琶湖の湖底堆積物中の微量元素の垂直分布
(愛知医大¹⁾・名大年代センター²⁾・琵琶湖研³⁾・名大理⁴⁾ ○小島貞男¹⁾・中村俊夫²⁾・太田
友子²⁾・横田喜一郎³⁾・小田寛貴⁴⁾・曾我恭子⁴⁾・古川路明⁴⁾

- 2C10 琵琶湖湖底堆積物中の天然(⁷Be, ²¹⁰Pb)及び人工放射性核種(¹³⁷Cs, ^{239,240}Pu)
(金沢大学LLRL・*滋賀県琵琶湖研) ○吉田義久・山本政儀・横田喜一郎*・小藤久毅・小村和久

<昼休み 12:30 - 14:00>

研究連絡委員会: 広沢クラブ2階会議室 (12:40 - 13:40)

若手の会総会: 事務棟第2会議室 (12:40 - 13:40)

午後 (14:00 - 17:55)

記念講演

[C会場 (生物科学研究棟鈴木梅太郎ホール)]

座 長 佐野博敏 (14:00 - 15:30)

- 2M01 放射化学領域における木村健二郎博士の業績
(理研名誉研究員・東京大名誉教授) 斎藤信房
2M02 木村健二郎 一時代と生涯
(青山学院大理工) 木村 幹

座 長 今村峯雄 (15:30 - 16:15)

- 2M03 ビキニの灰から宇宙核化学へ
(東京大名誉教授) 本田雅健

座 長 吉原賢二 (16:25 - 17:10)

- 2M04 不足当量法の創始と発展
(石巻専修大) 鈴木信男

座 長 馬場 宏 (17:10 - 17:55)

- 2M05 NEETとは何か?
(神戸女子大) 音在清輝

<懇親会: 第一ホテル光が丘 (18:30 - 20:30)>

第3日 10月24日(木)

午前(9:00 - 12:30)

一般講演

[A会場(仁科記念棟仁科ホール)]

[錯体・溶媒抽出]

座長 関根 勉 (9:00 - 10:00)

- 3A01 LaCl₃とdpmの気相錯形成反応
(新潟大理) ○金子哲也・蒲田早苗・田村啓子・古越靖武・工藤久昭
- 3A02 混合溶媒(DMSO/水)中のNd³⁺とCl⁻の相互作用についての研究
(静岡大理・東北大金研*) ○中村光弘・菅沼英夫・佐藤伊佐務*・大森 巍
- 3A03 溶液内におけるランタノイド-二座配位有機リン化合物錯体の構造
(原研) ○矢板 毅・館盛勝一
座長 菅沼英夫 (10:00 - 11:00)
- 3A04 四座シッフ塩基配位子をもつニトリドテクネチウム錯体のTc(VI)からTc(V)への還元反応
(東北大院理) ○瀧田 滋・高山 努・関根 勉・工藤博司
- 3A05 cis-[Tc^VNCl₂(terpy)]の合成と性質
(東北大院理) ○押切 忍・高山 努・関根 勉・工藤博司
- 3A06 TBPによるヘキサクロロテクネチウム(IV)酸イオンの溶媒抽出
(原研) ○渡辺 智・橋本和幸
座長 館盛勝一 (11:10 - 11:50)
- 3A07 TPACによるテトラクロロニトリドテクネチウム(VI)酸イオンの溶媒抽出挙動(2)
(静岡大理) 朝比奈千枝・菅沼英夫・○大森 巍
- 3A08 中性子照射テトラフェニルアルソニウム・クロリドを用いるモリブデンの不足当量抽出
(NTT基礎総研) 重松俊男
座長 重松俊男 (11:50 - 12:30)
- 3A09 高塩基性水溶液中におけるウラン(VI)の加水分解種およびヒドロキソ炭酸錯体の測定
(京大炉・*阪大工) 山村朝雄・○北村 暁*・森山裕丈・西川佐太郎・小椋正道・長谷博友
- 3A10 無担体¹⁸⁸Reを用いた¹⁸⁸Re-HEDP錯体の合成とその安定性
(原研アイソトープ部) 橋本和幸

[B会場(レーザー研究棟大河内記念ホール)]

[PAC・陽電子・ドップラー拡がり]

座長 久保謙哉 (9:00 - 10:00)

- 3B01 短寿命 RI を用いるTDPACによる分子磁性体の研究
(理研^A・電通大^B・京大原子炉^C) ○大久保嘉高^A・安部静子^A・岡田卓也^A・中村 仁^A・安部
文敏^A・浅井吉蔵^B・米田淳郎^B・川瀬洋一^C・上原進一^C
- 3B02 陽電子消滅法による高分子材料の空孔分布
(¹高エネ研・²総研大・³開放研・⁴住友化学・精化研) ○鈴木健訓¹・沖 雄一¹・沼尻正晴¹・
三浦太一¹・近藤健次郎¹・大島永康²・伊藤泰男³・林 利明⁴・中村 宏⁴
- 3B03 金属中のホウ素から生成する⁷Liの減速定数
(大同工大・原研東海・東大原セ) ○酒井陽一・米沢仲四郎・松江秀明・澤幡浩之・伊藤
泰男

[中間子]

座長 伊藤泰男 (10:00 - 10:40)

- 3B04 $\text{Co}_x\text{Ga}_{1-x}(\text{acac})_3$ 系での正ミュオンの挙動
(東大理) ○久保謙哉・田村 大・富永 健・西山樟生・永嶺謙忠
- 3B05 液相におけるパイ中間子水素原子の挙動に関する考察
(名大理^a・阪大理^b・KEK^c) ○室山俊浩^a・篠原 厚^a・斎藤 直^b・横山明彦^b・三浦太一^c・古川路明^a

[メスbauer分光]

座長 高橋 正 (10:50 - 11:50)

- 3B06 Fe-C系超微粒子のメスbauerスペクトル
(大同工大) ○深谷隆志・岩間三郎・酒井陽一・大下一政
- 3B07 メスbauer分光法によるレーザー蒸発した鉄微粒子の反応の研究
(東大理) ○山田康洋・富永 健
- 3B08 ^{133}Cs の81keV準位における有効核電荷半径の測定(II)
(信州大教・高エネ研^A・原研^B・静岡大理^C・東大核研^D) ○田中栄司・石井寛子・村松久和・三浦太一^A・小泉光生^B・長 明彦^B・関根俊明^B・矢永誠人^C・藤田雄三^D・小俣和夫^D

座長 前田米蔵 (11:50 - 12:30)

- 3B09 ウラン化合物のメスbauer分光による研究
(阪大基礎工・原研先端研¹・阪大理²) ○筒井智嗣・中田正美¹・正木信行¹・佐伯正克¹・芳賀芳範¹・山本悦嗣¹・大貫惇睦^{1,2}・那須三郎
- 3B10 高レベル廃棄物の地層処分に関する研究 -水との接触による人工バリア物質中の鉄化学形態の変化-
(昭和薬大¹・動燃²) ○遠藤和豊¹・外角直樹¹・武田淳子¹・蛭沼利江子¹・吉川英樹²・楠戸伊緒里²

[C会場 (生物科学研究棟鈴木梅太郎ホール)]

[環境・地球]

座長 長崎晋也 (9:00 - 10:00)

- 3C01 琵琶湖におけるウランの地球化学 -堆積物・湖水間のUの移行挙動-
(金沢大理・LLRL¹・滋賀県琵琶湖研²) ○小藤久毅¹・山本政儀¹・横田喜一郎²・吉田義久・小村和久¹
- 3C02 大気中での飛行が長い土壌粒子塵中のPu-239, 240濃度
(金沢大理) 柴 由美子・古谷奈己・ハク M.A.・○中西 孝
- 3C03 ポーキサイトとアルミニウム試薬中のウランの放射能比の測定
(明治大理工) ○齊藤 敬・佐藤 純

座長 佐藤 純 (10:00 - 11:00)

- 3C04 時間分解レーザー誘起蛍光分析によるウラン(VI)イオン検出に及ぼす塩化物イオンの影響
(¹東大院工・²FZR) ○長崎晋也¹・田中 知¹・鈴木篤之¹・G. Geipel²・G. Bernhard²・H. Nitsche²
- 3C05 高エネルギー物理学研究所周辺の水環境中のトリチウム濃度
(高エネ研) ○三浦太一・高原伸一・穂積憲一・平 雅文・神田征夫・近藤健次郎
- 3C06 宍道湖における鉛-210の分布
(地質調査所) ○金井 豊・井内美郎・山室真澄

座長 大橋國雄 (11:10 - 11:50)

3C07 液体シンチレーションスペクトロメーターを用いた α - α 連続壊変時間間隔解析法(TIA)による温泉沈殿の放射性核種分析

(新潟大理)○米山裕美子・福山直人・岩橋貴志・橋本哲夫

3C08 上層大気のトレーサーとしてのBe-7

(気象研)○五十嵐康人・広瀬勝己・宮尾 孝・青山道夫

座長 中西 孝 (11:50 - 12:30)

3C09 中性子放射化分析による富士川水系におけるバナジウムの起源と挙動

(¹山梨環境研・²大同工大・³立教大原研)○輿水達司¹・酒井陽一²・大下一政²・戸村健児³

3C10 ⁶⁴Cuと⁶⁶Cuを分析核種とする中性子放射化分析による降水中の銅の定量とその比較

(立教大原研・大同工大)○戸村健児・酒井陽一・大下一政・輿水達司

<昼休み 12:30 - 13:40>

午後 (13:40 - 17:40)

特別講演

[C会場(生物科学研究棟鈴木梅太郎ホール)]

座長 中原弘道 (13:40 - 14:30)

3I01 Current Status and Progresses of Radiochemistry In China. (Peking Univ.) Yuanfang Liu

ポスターセッション

[短時間口頭発表: C会場(生物科学研究棟鈴木梅太郎ホール)](14:40 - 16:10)

[ポスター発表: P会場(生物科学研究棟2・3階ロビー)](16:10 - 17:40)

座長 大森 巍 (14:40 - 15:10)

3P01 ²⁵²Cfの自発核分裂における核分裂生成物の核異性体生成比の測定

(新潟大理)○長沢和美・斉藤里栄・工藤久昭

3P02 カウンター法による²³⁸U + p反応系における核分裂機構の研究

(阪大理・原研・都立大・東大理)○中西 潔・高宮幸一・井上貴和・横山明彦・斎藤 直・馬場 宏・西中一朗・塚田和明・大浦泰嗣・永目論一郎・趙 宇亮・谷川勝至

3P03 ²⁴¹Amの中性子捕獲断面積の測定

(原研)篠原伸夫・○初川雄一・畑 健太郎・本石章司・小林勝利・河野信昭・棚瀬正和

3P04 中間エネルギー領域の¹⁴N + ¹⁶⁵Ho反応系および⁴⁰Ar + ¹⁴¹Pr反応系における運動量移行

(阪大理・理研・名大理・愛知医大)向 和彦・横山明彦・森本真哉・○斎藤 直・馬場 宏・大久保嘉高・篠原 厚・室山俊浩・古川路明・小島貞男

3P05 クーロン障壁透過率から計算される α 放射体の半減期について

(共立薬大)○本間義夫・村瀬裕子・繁田恵子

3P06 放射化学的方法による未知核種²³⁶Amの同定

(原研アイソトープ¹・都立大理²)○大浦泰嗣¹・塚田和明¹・初川雄一¹・大山健志²・

趙 宇亮²・末木啓介²・篠原伸夫¹・西中一朗¹・畑 健太郎¹・永目論一郎¹・市川進一¹

3P07 ヨードベンゼンジアセテート類 $\text{PhI}(\text{O}_2\text{CCH}_n\text{X}_{3-n})_2$ (X = F, Cl, Br; n = 1 - 3)の¹²⁷Iメスbauerースペクトル

(東邦大理・東大原セ*)○高橋 正・中島則男・竹田満洲雄・澤幡浩之*・伊藤泰男*

- 3P08 高分子鉄2価スピネロスオーバー錯体における核壊変の効果
(理研・東邦大理) ○佐藤琢真・安部文敏・北澤孝史・竹田満洲雄
- 3P09 スピネロスオーバーを示す $[\text{Ni}(\text{II})(\text{CN})_4\text{Fe}(\text{II})]$ ユニットを持つ2次元ポリマー錯体の ^{57}Fe メスバウアースペクトル
(東邦大理) ○北澤孝史・江口美砂子・高橋 正・竹田満洲雄
- 3P10 水酸化ネプツニウム(IV)及び水酸化ネプツニル(V)のメスバウアー分光法による研究
(原研) ○中田正美・正木信行・佐伯正克・山下利之
- 3P11 鉄鉱物のメスバウアースペクトル - 銑鉄原料としてのキャラクタリゼーション-
(大同工大) ○酒井陽一・横井時秀・大下一政
- 3P12 酸化鉄を含むガリウム酸塩ガラスの結晶化と赤外透過性および磁性の相関
(九大理) ○久富木志郎・西田哲明・前田米藏
座長 三頭聰明 (15:10 - 15:40)
- 3P13 $\text{Cu}_{1-x}\text{Fe}_x\text{GeO}_3$ に於ける ^{57}Fe メスバウアー分光
(理研・金材研^A) ○岡田卓也・北澤英明^A・中村 仁・小林義男・菅原 健・安部文敏
- 3P14 $\text{Cu}_{1-x}\text{Ni}_x\text{Cr}_2\text{O}_4$ における巨大超微細磁場と四極子分裂の相関
(理研・日立MSRD^A・金材研^B) ○中村 仁・岡田卓也・野呂良彦^A・小林義男・北澤英明^B・安部文敏
- 3P15 筑波大タンデムを用いた ^{36}Cl 測定法の開発
(筑波大AMSグループ) ○宮崎紀彦・関 李紀・馬場隆行・船矢仁奈・高橋 努・皆倉輝志・長島泰夫
- 3P16 土壤微生物の関与した大気-土壌系での分子状トリチウムの環境動態
(九大理・九大工*・九大RI**) ○柿内秀樹・百島則行・前田米藏・岡井富雄*・杉原真司**・大崎 進**
- 3P17 土壤の酸化還元状態変化とTcの挙動について
(放医研) ○田上恵子・内田滋夫
- 3P18 深海底堆積物中のPu-239, 240蓄積量
(金沢大理) ○ハク M.A.・中西 孝
- 3P19 Cs-137, Be-7を用いた林地土壌の移動・侵食の推定
(^A金沢理・^B名大農・^C愛教大教・^D三重県林技センター) ○浜島靖典^A・竹中千里^B・恩田裕一^B・古田 実^C・神谷義久^C・野々田稔郎^D
- 3P20 イメージングアナライザを用いた岩石試料中の天然放射能分布
(日大文理・大妻女子大・昭和薬大) ○小林貴之・堀内公子・遠藤和豊
- 3P21 本邦河川水中の ^{90}Sr , ^{137}Cs および ^{239}Pu の分布
(青学大理工) ○齋藤裕子・西村幸洋・北田善則・長谷川将彦・戸谷 輝・原川裕章・古里直久・木村 幹
- 3P22 水溶性シンチレーションカクテル剤を用いるラドンの定量
(静岡大理) 大野敦史・吉岡潤江・○矢永誠人・長谷川園彦
- 3P23 小容量電解濃縮セルの特性と環境トリチウム測定への適用
(大阪薬大) ○木村捷二郎・佐藤普一・秋田美穂・上田陽子
- 3P24 Multitracer model study on the effect of acid rain on the adsorption of trace elements on soil
(理研) ○王 海芳・安部静子・竹松 伸・安部文敏
座長 酒井 宏 (15:40 - 16:10)
- 3P25 機器中性子放射化分析法および中性子誘起即発 γ 線分析法による遠洋深海チャート層の分析
(¹東大院総合・²東工大理・³原研・⁴東大原総セ) ○久保健一¹・松尾基之¹・磯崎行雄²・米沢伸四郎³・松江秀明³・澤幡浩之⁴

- 3P26 レーザー光音響法を用いるコロイド粒子の測定とその成長過程の研究
(東北大院理) ○内藤彩子・関根 勉・工藤博司
- 3P27 安息香酸の位置選択的水素同位体交換反応 II
(千葉大薬・分析センター*) ○長谷川秀昭・関 宏子*・大橋國雄
- 3P28 溶解度制限固相の結晶化に対する放射線効果の予察的解析
(動燃¹・CSD²・三菱重工³) ○小平秀樹²・油井三和¹・牧野仁史¹・根山敦史²・北尾秀夫³・立川博一³・片岡伸一³
- 3P29 アミノキシムを配位子とするニトリドテクネチウム(V)錯体の構造
(東北大院理) 可児祐子・○高山 努・関根 勉・工藤博司
- 3P30 ヘキサキス(チオウレア)レニウム(III)イオンの加水分解反応
(静岡大理) ○湯浅真彦・菅沼英夫・大森 巍
- 3P31 放射化学的手法によるEuフラーレンの研究
(都立大理・新潟大院自然) ○山内 崇・遠藤正朗・秋山和彦・末木啓介・菊地耕一・中原弘道・赤坂 健
- 3P32 ランタノイド金属フラーレンの研究
(都立大理・新潟大院自然) ○秋山和彦・遠藤正朗・末木啓介・菊地耕一・中原弘道・赤坂 健
- 3P33 核的手法を用いた放射性フラーレンの生成(III)
(都立大理・東北大核理研・原研アイソトープ部・東北大金研) ○末木啓介・菊地耕一・大槻 勤・榊本和義・永目諭一郎・三頭聰明
- 3P34 マルチトレーサーを用いるモノアミド抽出剤による貴金属元素抽出
(青学大理工・茨大理*・原研**・理研***) ○伊藤直弥・斎藤裕子・木村 幹・成田弘一*・矢板 毅**・館盛勝一**・安部静子***・安部文敏***
- 3P35 マルチトレーサー法による希土類元素の支持液体膜透過の研究
(理研) ○屋鋪一尋・片山 修・前田はるか・榎本秀一・尾崎卓郎・安部静子・安部文敏
- 3P36 マルチトレーサーを用いた固液吸着挙動の多元素同時解析(2) -非イオン性高分子吸着体および繊維状活性炭-
(放医研) ○柴田貞夫・野田 豊・(理研) 安部静子・榎本秀一・前田はるか・安部文敏

前日 10月21日(月)

若手の会シンポジウム：仁科記念棟仁科ホール (15:00 -)

理研加速器将来計画「RI ビームファクトリー」説明会とリングサイクロトロン見学会：

仁科記念棟仁科ホール・加速器施設 (16:00 -)

α放射体・環境放射能研究懇談会：研究本館 5階会議室(551号室) (16:25 -)

LIST OF PAPERS
presented at
**The 40th Symposium
on Radiochemistry**

Advisory Committee

K. Kimura (Aoyama Gakuin Univ.)
M. Imamura (INS, Tokyo Univ.)

Organizer

F. Ambe (RIKEN)

Executive Committee

S. Ambe (RIKEN)
N. Takematsu (RIKEN)
K. Takahashi (RIKEN)
Y. Kobayashi (RIKEN)
H. Maeda (RIKEN)
T. Sato (RIKEN)
S. Enomoto (RIKEN)
J. Nakamura (RIKEN)
T. Ozaki (RIKEN)

October 22 – 24, 1996
The Institute of Physical and Chemical Research
(RIKEN)

Memorial Lectures

14:00 - 17:55 (Wednesday, October 23)

- 2M01 DR. KENJIRO KIMURA. HIS CONTRIBUTIONS TO THE AREAS OF NUCLEAR AND RADIOCHEMISTRY
Nobufusa SAITO (*The Institute of Physical and Chemical Research (RIKEN), The University of Tokyo*)
- 2M02 KIMURA, KENJIRO ----- LIFE AND SCIENTIFIC CIRCUMSTANCES
Kan KIMURA (*College of Science and Engineering, Aoyama Gakuin University*)
- 2M03 FROM "BIKINI ASHES" TO COSMO NUCLEAR CHEMISTRY
Honda MASATAKE (*Professor Emeritus University of Tokyo*)
- 2M04 ORIGINATION AND DEVELOPMENT OF SUBSTOICHIOMETRY
Nobuo SUZUKI (*Ishinomaki Senshu University*)
- 2M05 WHAT IS NEET?
Kiyoteru OTOZAI (*Faculty of Home Economics, Kobe Womens University*)

Plenary Lectures

13:40 - 14:30 (Tuesday, October 22)

- 1I01 NEW USAGE OF RADIOACTIVE ISOTOPES AT RI BEAM FACTORY
Isao TANIHATA (*The Institute of Physical and Chemical Research (RIKEN)*)

13:40 - 14:30 (Thursday, October 24)

- 3I01 CURRENT STATUS AND PROGRESS OF RADIOCHEMISTRY IN CHINA
Yuanfang LIU (*Peking Univ.*)

Lecture Session

Nuclear Reaction I

9:15 - 10:15 (Tuesday, October 22)

- 1A01 CORRELATION BETWEEN MASS DIVISION MODES AND TWO DEFORMATION PATHS IN LOW ENERGY FISSION OF ACTINIDES
Yuichiro NAGAME, Ichiro NISHINAKA, Kazuaki TSUKADA, Yasuji OURA, Shin-ichi ICHIKAWA, Hiroshi IKEZOE (*Japan Atomic Energy Research Institute*)
Yuliang ZHAO, Keisuke SUEKI, Hiromichi NAKAHARA (*Department of Chemistry, Tokyo Metropolitan University*)
Masashi TANIKAWA (*Department of Chemistry, University of Tokyo*)
Tsutomu OHTSUKI (*Laboratory of Nuclear Science, Tohoku University*)
Hisaki KUDO (*Department of Chemistry, Niigata University*)
Yasunori HAMAJIMA (*Department of Chemistry, Kanazawa University*)
Koichi TAKAMIYA, Kiyoshi NAKANISHI, Takakazu INOUE, Hiroshi BABA (*Department of Chemistry, Osaka University*)
Yong Hee CHUNG (*Department of Chemistry, Hallym University, Korea*)
- 1A02 ANGULAR MOMENTUM OF FISSION PRODUCTS IN $^{232}\text{Th} + p$ SYSTEM
Shin-ichi GOTO, Ken-ichirou YASUDA, Daiya KAJI, Hisaki KUDO (*Faculty of Science, Niigata University*)
Manabu FUJIOKA, Tsutomu SHINODUKA, Masahiro FUJITA, Ai WATANABE (*Tohoku University Cyclotron Radioisotope Center*)
- 1A03 COMPLETE AND INCOMPLETE FUSION FISSION AT THE ENERGY RANGE NEAR- AND SUB-COULOMB BARRIER
Yuliang ZHAO, Keisuke SUEKI, Hiromichi NAKAHARA (*Department of Chemistry, Tokyo Metropolitan University*)
Yuichiro NAGAME, Ichiro NISHINAKA, Kazuaki TSUKADA (*Japan Atomic Energy Research Institute*)
Masashi TANIKAWA (*Department of Chemistry, University of Tokyo*)

Nuclear Reaction II

10:15 - 11:15 (Tuesday, October 22)

- 1A04 GDR FISSION OF ^{238}U AND NUCLEAR PHASE TRANSITION
Hiroshi BABA, Naruto TAKAHASHI, Akihiko YOKOYAMA, Takayuki YAMAGUCHI, Daisaku YANO, Tadashi SAITO (*Faculty of Science, Osaka University*)
Noriko SHIRASU (*Japan Atomic Energy Research Institute*)
Yasunori HAMAJIMA (*Faculty of Science, Kanazawa University*)
Tsutomu OHTSUKI, Kuzuyoshi MASUMOTO (*Faculty of Science, Tohoku University*)
- 1A05 FAST FISSION MECHANISM AND DUALITY OF THE DIFFUSION PROCESS IN THE ($^{238}\text{U} + ^{12}\text{C}$) REACTION SYSTEM
Akihiko YOKOYAMA, Hiroshi BABA, Naruto TAKAHASHI, Tadashi SAITO (*Faculty of Science, Osaka University*)
- 1A06 STUDY ON CORRELATION BETWEEN OBSERVABLES OF $^{235}\text{U}(n_{\text{th}}, f)$
Koichi TAKAMIYA, Takakazu INOUE, Akihiko YOKOYAMA, Naruto TAKAHASHI, Tadashi SAITO, Hiroshi BABA (*Faculty of Science, Osaka University*)
Yoshihiro NAKAGOME (*Kyoto University Research Reactor Institute*)

Meteorite, Measurement Technique, Nuclear Reactor

11:25 - 12:25 (Tuesday, October 22)

- 1A07. COSMOGENIC NUCLIDES IN TSUKUBA METEORITE
Kazuhisa KOMURA, Mutsuo INOUE, Seichi YAMAZAKI, Yoshimasa MURATA (*Low Level Radioactivity Laboratory, Kanazawa University*)
Shigekazu YONEDA (*National Science Museum*)
- 1A08 EFFECT OF DISTORTION OF ELECTRONIC NOISE SHAPE ON ULTRA-PRECISE MEASUREMENT OF PHOTON ENERGY WITH A Ge SPECTROMETER
Toshiaki KISHIKAWA (*Kumamoto University, Faculty of Engineering*)
- 1A09 FAST BREEDER REACTOR VIEWED BY AN OLD-FASHIONED CHEMIST
Michiaki FURUKAWA (*Department of Chemistry, Faculty of Science, Nagoya University*)

Prompt γ Ray Analysis

9:15 - 10:15 (Tuesday, October 22)

- 1B01 EFFECT OF NEUTRON SCATTERING BY MATRIX HYDROGEN ON NEUTRON INDUCED PROMPT GAMMA-RAY ANALYSIS
Hideaki MATUE, Chushiro YONEZAWA (*Japan Atomic Energy Research Institute*)
- 1B02 DETERMINATION OF BORON IN ROCKS AND ENVIRONMENTAL REFERENCE MATERIALS BY NEUTRON-INDUCED PROMPT GAMMA-RAY ANALYSIS
Ruska Prima PUTRA, Wichian RATANATONGCHAI, Chushiro YONEZAWA, Hideaki MATSUE, Masaaki MAGARA (*Japan Atomic Energy Research Institute*)
- 1B03 DETERMINATION OF MAJOR ELEMENTS WITHIN CHINA AND PORCELAIN BY PROMPT GAMMA-RAY NEUTRON ACTIVATION ANALYSIS
Keisuke SUEKI, Mamoru KANEKO, Wataru SATO, Hiromichi NAKAHARA, Takeshi TOMIZAWA, Ichiro MORIMOTO (*Faculty of Science, Tokyo Metropolitan Univ., Faculty of Literature, Keio Univ.*)

Luminescence I

10:15 - 10:55 (Tuesday, October 22)

- 1B04 SOME PROPERTIES OF RADIATION-INDUCED LUMINESCENCE FROM WHITE MINERAL SAMPLES AND ITS APPLICATION
Noriyuki SUGAI, Miki TANAKA, Tetsuo HASHIMOTO (*Faculty of Science, Niigata University*)
- 1B05 ACCUMULATED γ -RAY DOSIMETRY AND TEMPERATURE ESTIMATION ONTO ATOMIC-BOMB-EXPOSED ROOF TILES USING RADIATION-INDUCED LUMINESCENCE FROM WHITE MINERALS
Tetsuo HASHIMOTO, Hajime KATAYAMA, Tomohiro KANETA (*Faculty of Science, Niigata Univ.*)

Luminescence II

11:05 - 11:45 (Tuesday, October 22)

- 1B06 DATING AND PALEOTEMPERATURE ESTIMATION OF ANCIENT EARTHENWARE USING THERMOLUMINESCENCE FROM QUARTZ GRAINS
Tetsuo HASHIMOTO, Hisanobu SAKAUE, Yasuhiro TESHIROGI (*Faculty of Science, Niigata University*)
- 1B07 TWO DIMENSIONAL IMAGES OF OPTICALLY STIMULATED LUMINESCENCE (OSL) FROM NATURAL ROCK SLICES
Toshihiko ARIMURA, Shin NOTOYA, Tetsuo HASHIMOTO (*Faculty of Science, Niigata University*)

Radioluminography, Determination

11:45 - 12:25 (Tuesday, October 22)

- 1B08 RADIOCHEMICAL NEUTRON ACTIVATION ANALYSIS OF COPPER ON AND NEAR THE SURFACE OF SEMICONDUCTOR SILICON BY THE USE OF RADIOLUMINOGRAPHY
Tadashi NOZAKI (*Purex Co.*)
Hisashi MURAOKA, Kenji TOMURA (*Institute for Atomic Energy, Rikkyo University*)
- 1B09 DETERMINATION OF ^{226}Ra IN LEAD
Atsushi MORI, Shogo SUZUKI, Sumiko OKADA, Shyoji HIRAI (*Atomic Energy Research Laboratory Musashi Institute of Technology*)
Satoaki MITSUGASHIRA (*Oarai-branch, IMR, Tohoku University*)

Tracer, Multitracer, Organism I

9:15 - 10:15 (Tuesday, October 22)

- 1C01 DETERMINATION OF METAL CONTENTS AND ENZYMIC ACTIVITY FOR SUPEROXIDE DISMUTASE AS A RADIOROLOGICAL PROTECTION ENZYME
Yuko MURASE, Isao MURAKAMI, Yoshio HOMMA, Haruyo IGUCHI, Misato SHIBUYA (*Kyoritsu College of Pharmacy*)
- 1C02 POTASSIUM AND RUBIDIUM TRANSPORT IN RAT ERYTHROCYTE
Masahiro NATSUHORI, Shigetoshi KOSAKA, Nobuhiko ITO (*Kitasato University, School of Veterinary Medicine and Animal Sciences*)
- 1C03 THE DEVELOPMENT OF MULTITRACER TECHNIQUE IN THE BIO-TRACE ELEMENT RESEARCH
Shuichi ENOMOTO, Haruka MAEDA, Shizuko AMBE, Fumitoshi AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)
Takuo OZAKI (*Radioisotope Center, The University of Tokyo, The Institute of Physical and Chemical Research (RIKEN)*)

Tracer, Multitracer, Organism II

10:15 - 11:15 (Tuesday, October 22)

- 1C04 BIOBEHAVIOR OF TRACE Mn, Fe, Zn, Se ELEMENTS IN THE NORMAL MICE: AGE EFFECT ON THE TISSUE UPTAKE RATE
Shigeo OISHI, Rie TAKAFUJI, Noriko FUKUMOTO, Ryohei AMANO, Atsushi ANDO (*School of Health Sciences, Faculty of Medicine, Kanazawa University*)
Shuichi ENOMOTO, Fumitoshi AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)
- 1C05 BIOBEHAVIOR OF MULTITRACER IN MICE BRED UNDER DIFFERENT OXYGEN GAS PERCENTAGE
Ryohei AMANO, Shigeo OISHI (*School of Health Sciences, Faculty of Medicine, Kanazawa University*)
Shuichi ENOMOTO, Fumitoshi AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)
- 1C06 THE BIO-TRACE ELEMENT-BINDING OF VARIOUS SERUM-PROTEIN INVESTIGATED BY MENAS OF MULTITRACER TECHNIQUE
Naoki SOTOGAKU, Rieko HIRUNUMA, Kazutoyo ENDO (*Showa college of Pharmaceutical Sciences*)
Shuichi ENOMOTO, Shizuko AMBE, Fumitoshi AMBE (*The Institut of Physical and Chemical Research (RIKEN)*)

Tracer, Multitracer, Organism III

11:25 - 12:25 (Tuesday, October 22)

- 1C07 STUDY OF THE ABSORPTION OF TRACE ELEMENTS INTO PLANTS BY MULTITRACER

TECHNIQUE

Takuo OZAKI (*Radioisotope Center, The University of Tokyo, The Institut of Physical and Chemical Research (RIKEN)*)

Shuichi ENOMOTO, Shizuko AMBE, Fumitoshi AMBE (*The Institut of Physical and Chemical Research (RIKEN)*)

Yoshitaka MINAI (*Department of Chemistry, The University of Tokyo*)

Yoshihiro MAKIDE (*Radioisotope Center, The University of Tokyo*)

- 1C08 DETERMINATION OF RARE EARTH ELEMENTS IN FERN LEAVES USING INSTRUMENTAL NEUTRON ACTIVATION ANALYSIS

Jitsuya TAKADA, Tenuie SUMINO, Yoshiko TANAKA, Mitsuhiko AKABOSHI (*Research Reactor Institute, Kyoto University*)

Kazuo NISHIMURA (*Faculty of Agriculture, Kyoto University*)

- 1C09 DNA STRAND BREAKS INDUCED BY TRANSITION METAL AND THE EFFECT OF GREEN TEA-CATECHIN ON ITS ACTION-BEHAVIOR OF IRON EPIGALLOCATECHIN GALLATE COMPLEX IN DNA SOLUTION

Miyuki HIRASAWA, Hiroe YOSHIOKA, Kumihiko HASEGAWA (*Radiochemistry Research Laboratory, Faculty of Science, Shizuoka University*)

Hisashi YOSHIOKA (*Division of Environmental Health Sciences, Graduate School of University of Shizuoka*)

18:00 - 20:00 (Tuesday, October 22)

Nuclear Chemistry Group Meeting

Activation Analysis Group Meeting

Nuclear Probe Chemistry Group Meeting

Nuclear Reaction III

9:00 - 10:00 (Wednesday, October 23)

- 2A01 PHOTOFRAGMENTATION PRODUCTS FROM VARIOUS TARGETS AT INTERMEDIATE-ENERGIES

Hiroshi MATSUMURA, Syouhei OKIZAKI, Sanae TSUCHIDA, Koushin WASHIYAMA, Hiromitsu HABA, Yutaka MIYAMOTO, Koh SAKAMOTO (*Faculty of Science and Graduate School of Natural Science, Kanazawa University*)

Seiichi SIBATA (*Research Reactor Institute, Kyoto University*)

Ichiro FUJIWARA (*School of Economics, Otemongakuin University*)

Michiaki FURUKAWA (*Faculty of Science, Nagoya University*)

Mineo IMAMURA (*Institute for Nuclear Study, University of Tokyo*)

Hisao NAGAI (*College of Humanities and Sciences, Nihon University*)

Kouichi KOBAYASHI (*Research Center for Nuclear Science and Technology, University of Tokyo*)

- 2A02 RECOIL ENERGIES OF PHOTOSPALLATION PRODUCTS IN Cu USING THE THICK TARGET-THICK CATCHER METHOD

Hiromitsu HABA, Hiroshi MATSUMURA, Yutaka MIYAMOTO, Koh SAKAMOTO (*Faculty of Science and Graduate School of Natural Science, Kanazawa University*)

Seiichi SHIBATA (*Research Reactor Institute, Kyoto University*)

Ichirou FUJIWARA (*School of Economics, Otemongakuin University*)

Michiaki FURUKAWA (*Faculty of Science, Nagoya University*)

- 2A03 LINEAR MOMENTUM TRANSFER IN THE HEAVY-ION REACTION OF COPPER AT INTERMEDIATE AND HIGH ENERGIES
Atsushi SHINOHARA, Toshiharu MUROYAMA, Michiaki FURUKAWA (*Fac. of Sci., Nagoya Univ.*)
 Akihiko YOKOYAMA, Shinya MORIMOTO, Tadashi SAITO, Hiroshi BABA (*Fac. of Sci., Osaka Univ.*)
 Yoshitaka OHKUBO, Fumitoshi AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)
 Sadao SHIBATA (*NIRS*)
 Sadao KOJIMA (*Aichi Medical Univ.*)

New Isotopes, Nuclear Levels

10:00 - 11:00 (Wednesday, October 23)

- 2A04 SEARCH FOR UNKNOWN NEUTRON-RICH LANTHANOID ISOTOPES PRODUCED IN PROTON-INDUCED FISSION OF ACTINIDE
Kazuaki TSUKADA, Shin-ichi ICHIKAWA, Akihiko OSA, Yuichiro NAGAME, Yasuji OURA, Hideki IIMURA, Ichiro NISHINAKA, Yuichi HATSUKAWA (*Department of Radioisotopes, Japan Atomic Energy Research Institute*)
 Masato ASAI, Yasuaki KOJIMA, Hiroshi YAMAMOTO, Kiyoshi KAWADE (*Department of Nuclear Engineering, Nagoya University, and Department of Energy Engineering and Science, Nagoya University*)
- 2A05 SEARCH FOR NEW ACTINIDE ISOTOPES USING THE GAS-JET COUPLED JAERI-ISOL
Takeshi OHYAMA, Yuliang ZHAO, Keisuke SUEKI, Hiromichi NAKAHARA (*Faculty of Science, Tokyo Metropolitan University*)
 Kazuaki TSUKADA, Shin-ichi ICHIKAWA, Yasuji OURA, Yuichi HATSUKAWA, Kentaro HATA, Ichiro NISHINAKA, Yuichiro NAGAME (*Department of Radioisotopes, Japan Atomic Energy Research Institute*)
 Masato ASAI (*Department of Nuclear Engineering, Nagoya University*)
 Tomoaki HIROSE, Yasuaki KOJIMA, Hiroshi YAMAMOTO, Kiyoshi KAWADE (*Department of Energy Engineering and Science, Nagoya University*)
- 2A06 A STUDY ON THE LEVEL STRUCTURE OF EVEN-A Ba NUCLEI BY MEANS OF A γ - γ ANGULAR CORRELATION MEASUREMENT
Akihiko OSA, Toshiaki SEKINE, Mitsuo KOIZUMI (*Department of Radioisotopes, Japan Atomic Energy Research Institute*)
 Masato ASAI, Yasuaki KOJIMA, Michihiro SHIBATA, Hiroshi YAMAMOTO, Kiyoshi KAWADE (*School of Engineering, Nagoya University*)

Activation Analysis I

11:10 - 11:50 (Wednesday, October 23)

- 2A07 DETERMINATION OF TRACE PLATINUM GROUP ELEMENTS IN GEOLOGICAL SAMPLES BY RADIOCHEMICAL NEUTRON ACTIVATION ANALYSIS
Tomonori UCHINO, Ping KONG, Mitsuru EBHARA, Hiromichi NAKAHARA (*Department of Chemistry, Faculty of Science, Tokyo Metropolitan University*)
- 2A08 INSTRUMENTAL NEUTRON ACTIVATION ANALYSIS OF RHODIUM IN STRONTIUM-BARIUM-NIOBATE
 Masaaki KATOH (*NTT Science and Core Technology Laboratory Group*)
Tadashi OHROKU (*NTT Advanced Technology Corp.*)
 Hiroki YONEZAWA (*NTT Technical Assistance and Support Center*)
 Shogo YAGI (*NTT Opto-electronics Laboratories*)

Activation Analysis II

11:50 - 12:30 (Wednesday, October 23)

- 2A09 COMPARISON OF NEUTRON ACTIVATION ANALYSIS FOR PLANTIMUMGROUP ELEMENTS WITH OTHER TECHNIQUES
Chifang CHAI (*Inst. High Energy Phys./ Lab. Nucl. Anal.*)
- 2A10 DETERMINATIO OF RARE EARTH ELEMENTS IN CHONDRITIC METEORITES BY INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY; A COMPARATIVE STUDY WITH RADIOCHEMICAL NEUTRON ACTIVATION ANALYSIS
Kazunori SHINOTSUKA, Mitsuru EBIHARA, Hiromichi NAKAHARA (*Faculty of Science, Tokyo Metropolitan University*)

Mössbauer Spectroscopy I

9:00 - 10:00 (Wednesday, October 23)

- 2B01 SYNTHESSES AND ELECTRONIC STATES OF IRON(III) COMPLEXES CONTAINING QUASI-CROWN ETHER RING
Shinya HAYAMI, Shuichi NOMIYAMA, Shigeyuki HIROSE, Yayoi YANO, Yonezo MAEDA (*Department of Chemistry, Faculty of Science, Kyushu University*)
Shinji SUGIHARA (*Radioisotope Center, Kyushu University*)
- 2B02 MÖSSBAUER SPECTRA OF THE MAGNETIC PARTICLES PRECIPITATED BY THE HEAT TREATMENT OF CALCIUM ALUMINATE GLASS
Tetsuaki NISHIDA, Shiro KUBUKI, Morihiro SHIBATA, Yonezo MAEDA (*Faculty of Science, Kyushu University*)
Toyomi TAMAKI (*Faculty of Science, Ochanomizu University*)
- 2B03 MÖSSBAUER SPECTRA OF MAGNETIC MATERIALS DERIVED FROM THE REACTION OF SALEN COMPLEXES AND $K_3Fe(CN)_6$ (2)
Seiichiro IJIMA, Fumio MIZUTANI (*National Institute of Bioscience and Human-Technology*)
Hitoshi MIYASAKA, Naohide MATSUMOTO, Hisashi OKAWA (*Faculty of Science, Kyushu University*)

Mössbauer Spectroscopy II

10:00 - 10:40 (Wednesday, October 23)

- 2B04 MÖSSBAUER SPECTROSCOPIC STUDY OF AZAFERROCENE DERIVATIVES
Takahiko KITAO, Ikuyo KIMURA (*Faculty of Science, Hiroshima University*)
Satoru NAKASHIMA (*Radioisotope Center, Hiroshima University*)
Hiroschi SAKAI (*Faculty of Science, Konan University*)
Yutaka MAEDA (*Research Reactor Institute, Kyoto University*)
- 2B05 MÖSSBAUER SPECTROSCOPIC STUDY ON THE DYNAMIC PROCESS OF METALLOCENE INCLUSION COMPOUNDS
Mitsuyori NAKASHITA, Hiroaki KOMATSU (*Faculty of Science, Hiroshima University*)
Satoru NAKASHIMA (*Radioisotope Center, Hiroshima University*)
Hiroschi SAKAI (*Faculty of Science, Konan University*)

Mössbauer Spectroscopy III

10:50 - 11:30 (Wednesday, October 23)

- 2B06 MAGNETISM AND MÖSSBAUER SPECTRA OF $FePS_3$ INTERCALATION COMPOUNDS
Hiroschi SAKAI, Takashi YAMAZAKI, Toshihiko SHIGEMATSU (*Faculty of Science, Konan University*)

Satoru NAKASHIMA (*Radioisotope Center, Hiroshima University*)

2B07 MÖSSBAUER SPECTROSCOPIC STUDIES OF LANTHANOID(III)-IRON(III)-a-DIIMINE COMPLEXES

Tatsuhiko NAWA, Hitoshi KUMAGAI, Susumu KITAGAWA, Motomi KATADA (*Faculty of Science, Tokyo Metropolitan University*)

Mössbauer Spectroscopy IV

11:30 - 12:30 (Wednesday, October 23)

2B08 ¹⁶⁶Er MÖSSBAUER SPECTRA OF ERBIUM(III) COMPOUNDS

Masuo TAKEDA, Hiroshi NANBA, Masashi TAKAHASHI (*Toho Univ., Fac. of Sci.*)

2B09 ANTIMONY-121 AND IRON-57 MÖSSBAUER SPECTRA OF HYPERVALENT ORGANO-ANTIMONY COMPOUNDS BEARING ANTIMONY-IRON BOND

Masaki MAEDA, Masashi TAKAHASHI, Masuo TAKEDA (*Faculty of Science, Toho University*)

Yukiya WAKISAKA, Yohsuke YAMAMOTO, Kin-ya AKIBA (*Faculty of Science, Hiroshima University*)

2B10 ANTIMONY-121 MÖSSBAUER SPECTRA OF EIGHT-MEMBERED HETEROCYCLIC ANTIMONY(III) COMPOUNDS

Masaki MAEDA, Masashi TAKAHASHI, Masuo TAKEDA (*Faculty of Science, Toho University*)

Elmer BRAEU, Martin DRAEGER (*Institut für Anorganische Chemie und Analytische Chemie, Johannes Gutenberg-Universität, Mainz, Germany*)

Environment, The Earth I

9:00 - 9:40 (Wednesday, October 23)

2C01 MULTI-ELEMENT DETERMINATION OF ESTUARINE SEDIMENTS BY NEUTRON INDUCED PROMPT GAMMA-RAY ANALYSIS AND INSTRUMENTAL NEUTRON ACTIVATION ANALYSIS
Akihito KUNO, Motoyuki MATSUO (*Graduate School of Arts and Sciences, The University of Tokyo*)

Chushiro YONEZAWA, Hideaki MATSUE (*Japan Atomic Energy Research Institute*)

Hiroyuki SAWAHATA (*Research Centre for Nuclear Science and Technology, The University of Tokyo*)

2C02 DISTRIBUTION OF ¹³⁷Cs IN ENVIRONMENTAL SOIL AND CRUDE DRUGS

Rumi YAMAOKI, Shoujiro KIMURA (*Osaka University of Pharmaceutical Sciences*)

Environment, The Earth II

9:40 - 10:40 (Wednesday, October 23)

2C03 THE APPLICATION OF KURRI-LINAC TO PHOTON ACTIVATION ANALYSIS OF ENVIRONMENTAL MATERIALS

Kazuyoshi MASUMOTO (*Laboratory of Nuclear Science, Tohoku University*)

Koh SAKAMOTO, Yutaka MIYAMOTO, J. H. ZAIDI, Akiko KAJIKAWA, Hiromitsu HABA (*Faculty of Science and Graduate School of Science, Kanazawa University*)

2C04 NEUTRON AND PHOTON ACTIVATION ANALYSIS OF GEOCHEMICAL AND PLANT SAMPLES - EFFECTS OF INTERFERING NUCLEAR REACTIONS -

Yutaka MIYAMOTO, Hiromitsu HABA (*Graduate School of Science, Kanazawa University*)

J.H.ZAIDI, Akiko KAJIKAWA, Koh SAKAMOTO (*Faculty of Science, Kanazawa University*)

Kazuyoshi MASUMOTO (*Laboratory of Nuclear and Science, Tohoku University*)

2C05 MIGRATION MECHANISM OF NATURAL RADIONUCLIDES IN EVERGREEN FORESTS

Tomoko BABA, Asuka YOSHIDA, Yuko TAGAWA, Shinji SUGIHARA, Yonezo MAEDA (*Faculty of*

Science, Kyushu University)

Youji INOKURA (Faculty of Agriculture, Kyushu University)

Susumu OSAKI (Radioisotope Center, Kyushu University)

Environment, The Earth III

10:50 - 11:50 (Wednesday, October 23)

- 2C06 SPECIATION OF RADIONUCLIDES IN FOREST SOILS AND SURFACE ORGANIC MATTERS SAMPLED AROUND THE CHERNOBYL NUCLEAR POWER PLANT

Miki WATANABE, Kan KIMURA (Aoyama Gakuin Univ.)

Hikaru AMANO, Takashi UENO, Takeshi MATSUNAGA, Nobuyuki YANASE (JAERI)

Yoshikazu ONUMA (IRM)

- 2C07 DISTRIBUTION AND BEHAVIOR OF Sr-90 AND Cs-137 IN TURPAN BASIN, CHINA

Yuko SAITO, Masako TAKSAKI, Noriko SHINJYO, Harumi KAWASHIMA, Kan KIMURA (College of Science and Engineering, Aoyama Gakuin University)

Sadayo YABUKI (The Institute of Physical and Chemical Research (RIKEN))

- 2C08 DISTRIBUTION AND BEHAVIOR OF NOBLE METALS IN DEEP SEA FLOOR SEDIMENTS SAMPLES

Masatake SATO, Naohisa FURUSATO, Yuko SAITO, Kan KIMURA (College of Science and Engineering, Aoyama Gakuin University)

Makio HONDA, Masasi KUSAKABE (Japan Marine Science & Technology (JAMSTEC))

Kazuhiro TOYODA (Graduate School of Environmental Earth Science, Hokkaido University)

Environment, The Earth IV

11:50 - 12:30 (Wednesday, October 23)

- 2C09 VERTICAL PROFILES OF CHEMICAL ELEMENTS IN THE SEDIMENT OF LAKE BIWA

Sadao KOJIMA (Radioisotope Research Center, Aichi Medical University)

Toshio NAKAMURA, Tomoko OHTA (Dating and Materials Research Center, Nagoya University)

Kiichiro YOKOTA (Lake Biwa Research Institute)

Hirota ODA, Kyoko SOGA, Michiaki FURUKAWA (Faculty of Science, Nagoya University)

- 2C10 NATURAL (^7Be , ^{210}Pb) AND ARTIFICIAL (^{137}Cs , $^{239,240}\text{Pu}$) RADIONUCLIDES IN SEDIMENT AT LAKE BIWA

Yoshihisa YOSHIDA, Masayoshi YAMAMOTO, Hisaki KOHUI, Kazuhisa KOMURA (Low Level Radioactivity Laboratory, Kanazawa University)

Kiichiro YOKOTA (Lake Biwa Research Institute)

Complexes, Solvent Extraction I

9:00 - 10:00 (Thursday, October 24)

- 3A01 GAS PHASE CHEMICAL REACTION OF $\text{La}(\text{dpm})_3$

Tetsuya KANEKO, Keiko TAMURA, Yasutake FURUKOSHI, Yohko TOSAKA, Hisaaki KUDO (Faculty of Science, Niigata University)

- 3A02 STUDY ON THE INTERACTION BETWEEN Nd^{3+} AND Cl^- IN MIXED ($\text{DMSO} + \text{H}_2\text{O}$) SOLVENT SYSTEM

Mitsuhiro NAKAMURA, Hideo SUGANUMA, Takashi OMORI (Faculty of Science, Shizuoka University)

Isamu SATOH (Institute for Materials Research, Tohoku University)

- 3A03 STRUCTURE OF THE BIDENTATE ORGANOPHOSPHORUS LIGAND-LANTHANIDE

COMPLEXES IN SOLUTION

Tsuyoshi YAITA, Shoichi TACHIMORI (*Japan Atomic Energy Research Institute*)

Complexes, Solvent Extraction II

10:00 - 11:00 (Thursday, October 24)

- 3A04 REDUCTION PROCESS FROM Tc(VI) TO Tc(V) OF NITRIDOTECHNETIUM(VI) COMPLEXES WITH TETRADENTATE SCHIFF BASE LIGANDS

Shigeru FUCHITA, Tsutomu TAKAYAMA, Tsutomu SEKINE, Hiroshi KUDO (*Graduate School of Science, Tohoku University*)

- 3A05 SYNTHESIS AND CHARACTERIZATION OF cis-[Tc^{IV}NCI₂(terpy)]

Shinobu OSHIKIRI, Tsutomu TAKAYAMA, Tsutomu SEKINE, Hiroshi KUDO (*Graduate School of Science, Tohoku University*)

- 3A06 SOLVENT EXTRACTION OF HEXACHLOROTECHNETATE(IV) ION WITH TBP

Satoshi WATANABE, Kazuyuki HASHIMOTO (*Japan Atomic Energy Research Institute*)

Complexes, Solvent Extraction III

11:10 - 11:50 (Thursday, October 24)

- 3A07 SOLVENT EXTRACTION BEHAVIOR OF TETRACHLORONITRIDOTECHNETATE(VI) ION WITH TETRAPHENYLARSONIUM CHLORIDE (2)

Kazuo ASAHINA, Hideo SUGANUMA, Takashi OMORI (*Faculty of Science, Shizuoka University*)

- 3A08 SUBSTOICHIOMETRIC EXTRACTION OF MOLYBDENUM WITH TETRAPHENYL ARSONIUM CHLORIDE LABELED BY NEUTRON IRRADIATION

Toshio SHIGEMATSU (*NTT Science and Core Technology Laboratory Group*)

Complexes, Solvent Extraction IV

11:50 - 12:30 (Thursday, October 24)

- 3A09 MEASUREMENTS OF HYDROLYSIS SPECIES AND HYDROXOCARBONATO COMPLEX OF U(VI) IN HIGHLY BASIC SOLUTION

Tomoo YAMAMURA, Hirotake MORIYAMA, Sataro NISHIKAWA, Seido OGURA, Hiroto HASE (*Research Reactor Institute, Kyoto University*)

Akira KITAMURA (*Faculty of Engineering, Osaka University*)

- 3A10 SYNTHESIS OF ¹⁸⁶Re-HEDP COMPLEX USING CARRIER-FREE ¹⁸⁶Re AND ITS STABILITY

Kazuyuki HASHIMOTO (*Department of Radioisotopes, Japan Atomic Energy Research Institute*)

PAC, Positron, Doppler Broadening

9:00 - 10:00 (Thursday, October 24)

- 3B01 TDPAC STUDIES ON METAL-COMPLEX FERRIMAGNETS

Yoshitaka OHKUBO, Shizuko AMBE, Takuya OKADA, Jin NAKAMURA, Fumitoshi AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)

Kichizo ASAI, Atsuro YONEDA (*The University of Electro-Communications*)

Yoichi KAWASE, Shin-ichi UEHARA (*Research Reactor Institute, Kyoto University*)

- 3B02 FREE VOLUME DISTRIBUTION DURING POLYMERIZATION OF BISPHENOL-A DICYANATE

Takenori SUZUKI, Yuichi OKI, Masaharu NUMAJIRI, Taichi MIURA, Kenjiro KONDO (*National Laboratory for High Energy Physics*)

Nagayasu OSHIMA (*The Graduate University for Advanced Studies*)

Yasuo ITO (*RCNST, The Univ. of Tokyo*)

- Toshiaki HAYASHI, Hiroshi NAKAMURA (*Fine Chemicals Research Lab., Sumitomo Chem.*)
 3B03. DEGRADATION CONSTANTS OF ^7Li PRODUCED IN METALS
Yoichi SAKAI, Chushiro YONEZAWA, Hideaki MATSUE, Hiroyuki SAWAHATA (*Daido Institute of Technology, Japan Atomic Energy Research Institute*)
 Yasuo ITO (*The University of Tokyo*)

Meson

10:00 - 10:40 (Thursday, October 24)

- 3B04 POSITIVE MUONS in $\text{Co}_x\text{Ga}_{1-x}(\text{acac})_3$
M. Kenya KUBO, Dai TAMURA, Takeshi TOMINAGA, Kusuo NISHIYAMA, Kanetada NAGAMINE
 (*School of Science, The University of Tokyo*)
 3B05 ON THE BEHAVIOR OF PIONIC HYDROGEN ATOMS IN LIQUID PHASE
Toshiharu MUROYAMA, Atsushi SHINOHARA, Michiaki FURUKAWA (*Faculty of Science, Nagoya University*)
 Tadashi SAITO, Akihiko YOKOYAMA (*Faculty of Science, Osaka University*)
 Taichi MIURA (*National Laboratory for High Energy Physics*)

Mössbauer Spectroscopy V

10:50 - 11:50 (Thursday, October 24)

- 3B06 MÖSSBAUER SPECTRA OF ULTRAFINE PARTICLES OF Fe-C SYSTEM
Takashi FUKAYA, Saburo IWAMA, Yoichi SAKAI, Kazumasa OSHITA (*Daido Institute of Technology*)
 3B07 THE MÖSSBAUER STUDY ON CHEMICAL REACTIONS OF IRON ATOMS AND CLUSTERS
 PRODUCED BY LASER VAPORIZATION
Yasuhiro YAMADA, Takeshi TOMINAGA (*School of Science, The University of Tokyo*)
 3B08 DETERMINATION OF THE CHANGE OF THE NUCLEAR CHARGE RADIUS DURING THE 81
 keV TRANSITION OF ^{133}Cs (II)
Eishi TANAKA, Hiroko ISHII, Hisakazu MURAMATSU (*Faculty of Education, Shinshu University*)
 Taichi MIURA (*National Laboratory for High Energy Physics*)
 Mitsuo KOIZUMI, Akihiko OSA, Toshiaki SEKINE (*Japan Atomic Energy Research Institute*)
 Makoto YANAGA (*Faculty of Science, Shizuoka University*)
 Yuzo FUJITA, Kazuo OMATA (*Institute for Nuclear Study, The University of Tokyo*)

Mössbauer Spectroscopy VI

11:50 - 12:30 (Thursday, October 24)

- 3B09 MÖSSBAUER STUDY OF URANIUM COMPOUNDS
Satoshi TSUTSUI, Saburo NASU (*Faculty of Engineering Science, Osaka Univ.*)
 Masami NAKADA, Nobuyuki M. MASAKI, Masakatsu SAEKI, Yoshinori HAGA, Etsushi
 YAMAMOTO (*Advanced Science Research Center, JAERI*)
 Yoshichika ONUKI (*Advanced Science Research Center, JAERI, Faculty of Science, Osaka Univ.*)
 3B10 STUDIES ON GEOLOGICAL DISPOSAL OF HIGH LEVEL RADIOACTIVE WASTE - CHANGE
 OF CHEMICAL STATES OF IRON IN ENGINEERED BARRIER MATERIALS IN THE PRESENCE
 OF WATER -
Kazutoyo ENDO, Naoki SOTOGAKU, Junko TAKEDA, Rieko HIRUNUMA (*Showa College of
 Pharmaceutical Sciences*)
 Iori KUSUDO, Hideki YOSHIKAWA (*Power Research and Nuclear Fuel Development Cooperation*)

Environment, The Earth V

9:00 - 10:00 (Thursday, October 24)

- 3C01 GEOCHEMISTRY OF URANIUM IN LAKE BIWA : BEHAVIOR OF URANIUM IN SEDIMENT AND INTERSTITIAL WATER
Hisaki KOFUJI, Masayoshi YAMAMOTO, Yoshihisa YOSHIDA, Kazuhisa KOMURA (*Low Level Radioactivity Lab., Kanazawa Univ.*)
Kiichirou YOKOTA (*Lake Biwa Research Institute*)
- 3C02 Pu-239,240 IN PERMANENTLY FLOATING MINERAL AEROSOL
Yumiko SHIBA, Nami FURUTANI, Mohammad Azizul HAQUE, Takashi NAKANISHI (*Faculty of Science, Kanazawa University*)
- 3C03 $^{234}\text{U}/^{238}\text{U}$ ACTIVITY RATIOS OF U IN BAUXITE AND AI-REAGENTS
Kei SAITOU, Jun SATO (*Department of Industrial Chemistry, School of Science and Technology, Meiji University*)

Environment, The Earth VI

10:00 - 11:00 (Thursday, October 24)

- 3C04 EFFECT OF CHLORIDE ION ON URANIUM(VI) DETECTION WITH TIME-RESOLVED LASER-INDUCED FLUORESCENCE SPECTROSCOPY
Shinya NAGASAKI, Satoru TANAKA, Atsuyuki SUZUKI (*The Department of Quantum Engineering and Systems Science, The University of Tokyo*)
Gerhard GEIPEL, Gert BERNHARD, Heino NITSCHKE (*Forschungszentrum Rossendorf e.V., Institut für Radiochemie*)
- 3C05 SURVEY OF TRITIUM CONCENTRATION IN THE ENVIRONMENTAL WATER IN AND AROUND THE NATIONAL LABORATORY FOR HIGH ENERGY PHYSICS
Taichi MIURA, Shin-ichi TAKAHARA, Ken-ichi HOZUMI, Masafumi TAIRA, Yukio KANDA, Kenjiro KONDO (*National Laboratory for High Energy Physics*)
- 3C06 DISTRIBUTION OF LEAD-210 AT THE LAKE SHINJI
Yutaka KANAI, Yoshio INOUCHI, Masumi YAMAMURO (*Geological Survey of Japan*)

Environment, The Earth VII

11:10 - 11:50 (Thursday, October 24)

- 3C07 DETERMINATION OF RADIOACTIVITIES IN TRAVERTINES USING OF THE TIME INTERVAL ANALYSIS ALPHA - ALPHA SUCCESSIVE DECAYS COMBINED WITH ALPHA LIQUID SCINTILLATION SPECTROMETER
Yumiko YONEYAMA, Naoto FUKUYAMA, Takashi IWAHASHI, Tetsuo HASHIMOTO (*Faculty of Science, Niigata University*)
- 3C08 Be-7; A GOOD TRACER FOR THE STRATOSPHERIC AIR
Yasuhito IGARASHI, Katsumi HIROSE, Takashi MIYAO, Michio AOYAMA (*Meteorological Research Institute*)

Environment, The Earth VIII

11:50 - 12:30 (Thursday, October 24)

- 3C09 GEOCHEMICAL ORIGIN AND BEHAVIOR OF VANADIUM IN WATER ALONG THE FUJIKAWA RIVER BY NEUTRON ACTIVATION ANALYSIS
Satoshi KOSHIMIZU (*Yamanashi Institute of Environmental Sciences*)
Yoichi SAKAI, Kazumasa OHSHITA (*Daido Institute of Technology*)

Kenji TOMURA (*Institute for Atomic Energy, Rikkyo University*)

3C10 DETERMINATION OF TRACE COPPER IN PRECIPITATION WATER BY NEUTRON ACTIVATION ANALYSIS USING ^{64}Cu AND ^{66}Cu

Kenji TOMURA (*Institute for Atomic Energy, Rikkyo University*)

Yoichi SAKAI, Kazumasa OHSHITA (*Daido Institute of Technology*)

Satoshi KOSHIMIZU (*Yamanashi Institute of Environmental Sciences*)

Poster Session

14:40 -17:40 (Tuesday, October 22)

1P01 CORRELATION BETWEEN TWO MASS DIVISION MODES AND NEUTRON MULTIPLICITY IN FISSION OF ACTINIDES

Ichiro NISHINAKA, Yuichiro NAGAME, Kazuaki TSUKADA, Yasuji OURA, Shin-ichi ICHIKAWA, Hiroshi IKEZOE (*Japan Atomic Energy Research Institute*)

Yuliang ZHAO, Keisuke SUEKI, Hiromichi NAKAHARA (*Faculty of Science, Tokyo Metropolitan University*)

Masashi TANIKAWA (*School of Science, The University of Tokyo*)

1P02 ANGULAR CORRELATION AND ANALYSIS BY TWO-DIMENSIONAL YIELD DISTRIBUTION AS A FUNCTION OF MASS AND TKE ON SPONTANEOUS FISSION OF ^{252}Cf

Takakazu INOUE, Koichi TAKAMIYA, Akihiko YOKOYAMA, Naruto TAKAHASHI, Tadashi SAITO, Hiroshi BABA (*Faculty of Science, Osaka University*)

Yoshihiro NAKAGOME (*Research Reactor Institute, Kyoto University*)

1P03 DETERMINATION OF γ EMISSION PROBABILITIES UTILIZING THE GROWTH-DECAY RELATIONSHIP

Hirokazu ARAKI, Jun SANADA, Akihiko YOKOYAMA, Tadashi SAITO, Hiroshi BABA (*Faculty of Science, Osaka University*)

Sataro NISHIKAWA, Hirotake MORIYAMA (*Research Reactor Institute, Kyoto University*)

1P04 LONGITUDINAL MOMENTUM TRANSFER OF HIGH-ENERGY ^{12}C ION WITH ^{197}Au TARGET

Shinya MORIMOTO, Hirokazu ARAKI, Jun SANADA, Takakazu INOUE, Kazuhiko MUKAI, Akihiko YOKOYAMA, Tadashi SAITO, Hiroshi BABA (*Fac. of Science, Osaka Univ.*)

Tomohisa DAIRAKU, Toshiharu MUROYAMA, Atsushi SHINOHARA (*Fac. of Scienc, Nagoya Univ.*)

Yoshitaka OHKUBO (*The Institute of Physical and Chemical Research(RIKEN)*)

Sadao SHIBATA (*National Institute of Radiological Sciences*)

1P05 MEASUREMENT OF TARGET-LIKE PRODUCTS FROM HEAVY-ION REACTIONS INDUCED BY HIGH-ENERGY ^{12}C IONS

Akihiko YOKOYAMA, Shinya MORIMOTO, Takakazu INOUE, Jun SANADA, Hirokazu ARAKI, Tadashi SAITO, Hiroshi BABA (*Faculty of Science, Osaka University*)

Sadao SHIBATA (*National Institute of Radiological Sciences*)

Atsushi SHINOHARA, Toshiharu MUROYAMA (*Faculty of Science, Nagoya University*)

1P06 MÖSSBAUER STUDY ON PHOTO-INDUCED AND CATION DRIVEN ELECTRON TRANSFER IN A COBALT-IRON CYANIDE

Yasuaki EINAGA, Akira FUJISHIMA (*Department of Applied Chemistry, Faculty of Engineering, The University of Tokyo*)

Osamu SATO, Tomokazu IYODA (*Kanagawa Academy of Science and Technology (KAST)*)

Kazuhito HASHIMOTO (*Department of Applied Chemistry, Faculty of Engineering, The University of Tokyo, Kanagawa Academy of Science and Technology (KAST)*)

Yoshio KOBAYASHI, Fumitoshi AMBE (*The Institute of Physical and Chemical Research(RIKEN)*)

- 1P07 POSITIVE MUONS IN LIQUID AMMONIA
M. Kenya KUBO, Kusuo NISHIYAMA (*School of Science, University of Tokyo*)
- 1P08 THE GAS SORPTION MECHANISM IN POLYMERS STUDIED BY POSITRON ANNIHILATION
Yasuo ITO, Hamdy F.M.MOHAMED (*RCNST, University of Tokyo*)
 Kazuhiro TANAKA, Ken-ichi OKAMOTO (*Fac. Engin., Yamaguchi Univ.*)
- 1P09 SIMULATION OF LINESHAPE OF PROMPT γ -RAY FROM ${}^7\text{Li}$ PRODUCED IN BORON COATED SILICON WAFER
Yoichi SAKAI (*Daido Institute of Technology*)
 Michael Kenya KUBO (*University of Tokyo*)
- 1P10 MÖSSBAUER SPECTROSCOPY OF ${}^{133}\text{Cs}$ FROM IMPLANTATION OF RADIOACTIVE ${}^{133}\text{Xe}$ IN METALS (II)
Hiroko ISHII, Eishi TANAKA, Hisakazu MURAMATSU (*Faculty of Education, Shinshu University*)
 Taichi MIURA (*National Laboratory for High Energy Physics*)
 Mitsuo KOIZUMI, Akihiko OSA, Toshiaki SEKINE (*Department of Radioisotopes, Japan Atomic Energy Research Institute*)
 Makoto YANAGA (*Faculty of Science, Shizuoka University*)
- 1P11 MÖSSBAUER SPECTROSCOPIC STUDY OF Eu - Nb MIXED OXIDE - CORRELATION BETWEEN HEATING CONDITIONS AND MOSSBAUER PARAMETERS-
Nobuyuki M. MASAKI, Masami NAKADA, Masakatsu SAEKI, Akio NAKAMURA (*Japan Atomic Energy Research Institute*)
- 1P12 APPLICATION OF CZT DETECTOR FOR MÖSSBAUER MEASUREMENTS
Norio NOGAWA, Yoshihiro MAKIDE (*Radioisotope Center, The University of Tokyo*)
 Kiyoshi NOMURA (*Faculty of Engineering, The University of Tokyo*)
- 1P13 IN-BEAM MÖSSBAUER SPECTROSCOPY IN MATERIALS SCIENCE WITH THE RIKEN ACCELERATORS
Yoshio KOBAYASHI, Jin NAKAMURA, Eiichi YAGI, Fumitoshi AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)
 Yutaka YOSHIDA, Ken-ichi YUKIHIRA, Kazuo HAYAKAWA (*Shizuoka Institute of Science and Technology*)
 Saburo NASU (*Faculty of Engineering Science, Osaka University*)
- 1P14 THE MAGNETIC PROPERTIES OF $\text{YSr}_2\text{Cu}_{3-x}\text{Fe}_x\text{O}_{7.8}$
Toshihiro FUWA, Nobuyoshi YAMADA (*The Univ. Electro-Commun.*)
 Naoshi IKEDA, Kay KOHN (*Waseda Univ.*)
 Jin NAKAMURA, Takuya OKADA (*The Institute of Physical and Chemical Research (RIKEN)*)
- 1P15 BIOBEHAVIOR OF THE RADIOACTIVE MULTITRACERS IN THE LEC RATS, WHICH HAS UNUSUAL METABOLIC CHARACTERISTICS OF ESSENTIAL COPPER ELEMENT -AN APPROACH USING OF GEL-FILTRATION TECHNIQUE-
Shigeo OISHI, Sayuri SETO, Tadanori TAKADA, Ryohei AMANO, Atsushi ANDO (*School of Health Sciences, Faculty of Medicine, Kanazawa University*)
 Shuichi ENOMOTO, Fumitoshi AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)
- 1P16 COMPARISON OF BEHAVIOR OF TRACE ELEMENTS BETWEEN VITAMIN D- OVERLOADED AND DEFICIENT RATS USING THE MULTITRACER TECHNIQUE
Rieko HIRUNUMA, Yoichi OKAMOTO, Naoki SOTOGAKU, Kazutoyo ENDO (*Showa College of Pharmaceutical Sciences*)
 Shuichi ENOMOTO, Shizuko AMBE, Fumitoshi AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)

- 1P17 ORGAN DISTRIBUTION OF ALUMINUM IN ANIMALS TREATED WITH ALUMINUM COMPLEXES
Tadayuki HINO, Seiki FUJIMOTO, Nobuyuki MASUYAMA, Shigenori OKA, Riichi TAWA, Hiromu SAKURAI (*Department of Analytical and Bioinorganic Chemistry, Kyoto Pharmaceutical University*)
 Jituya TAKADA, Rokuji MATSUSHITA (*Research Reactor Institute, Kyoto University*)
- 1P18 CHARACTERIZATION OF IRON ACCUMULATED IN THE TEETH OF SURGEON-FISH AND GIRELLA
Motoyuki MATSUO, Akihito KUNO (*Graduate School of Arts and Sciences, The University of Tokyo*)
 Chiya NUMAKO (*Faculty of Integrated Arts and Sciences, Tokushima University*)
 Toshiaki ISHII (*National Institute of Radiological Sciences*)
- 1P19 DETERMINATION OF THE TRACE ELEMENT IN POLLUTED RICE BY NEUTRON ACTIVATION ANALYSIS
Kouji TAKIGUCHI, Takehiro ZUSHI, Hiroe YOSHIOKA, Kunihiko HASEGAWA (*Radiochemistry Laboratory, Faculty of Science, Shizuoka University*)
 Chin-Wang HUANG (*Department of Chemistry, Chung Yuan University, Taiwan*)
 Kenji TOMURA (*Institute for Atomic Energy, Rikkyo University*)
- 1P20 PROTECTION MECHANISMS OF GREEN TEA CATECHIN ON DNA STRAND BREAKS INDUCED BY β -RAYS OF TRITIATED WATER
Hiromu KUROSAKI, Hiroe YOSHIOKA, Kunihiko HASEGAWA (*Radiochemistry Research Laboratory, Faculty of Science, Shizuoka University*)
 Hisashi YOSHIOKA (*Division of Environmental Health Sciences, Graduate School of University of Shizuoka*)
- 1P21 ^{14}C AGE MEASUREMENT ON THE ANCIENT DOCUMENT WITH AMS
Hirotaka ODA, Michiaki FURUKAWA (*Fac. of Science, Nagoya Univ.*)
 Toshio NAKAMURA (*Dating and Materials Research Center, Nagoya Univ.*)
- 1P22 RADIOACTIVITY IN BOOKS PRODUCED IN JAPAN (II)
Asaya KOBASHI (*School of Science, University of Tokyo*)
- 1P23
- 1P24 SYNTHESIS OF CARBON-11,14 LABELED FATTY ACIDS FOR MEDICAL AND ENVIRONMENTAL TRACER USE BY MALONIC ESTER SYNTHESIS AND ACETOACETIC ESTER SYNTHESIS
Koji OGAWA (*School of Allied Health Sciences, Kitasato University*)
 Tadashi NOZAKI (*PUREX CO., LTD*)
- 1P25 MULTITRACER STUDY ON ABSORPTION AND TRANSPORT OF RADIONUCLIDES IN KOMATSUNA
Satoshi NISHIZAWA, Yasuko KAWASHIMA (*The Institute of Physical and Chemical Research (RIKEN), Kitasato University*)
 Haruka MAEDA, Shuichi ENOMOTO, Takuo OZAKI, Taeko SHINONAGA, Shizuko AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)
 Hiroshi YASUDA, Shigeo UCHIDA (*National Institute of Radiological Sciences*)
- 1P26 MULTITRACER STUDY ON THE INTERACTION OF VARIOUS METAL IONS WITH HUMIC ACID AND POLYCARBOXYLIC ACIDS
Yoshio TAKAHASHI, Yoshitaka MINAI (*School of Science, The University of Tokyo*)
 Shizuko AMBE, Fumitoshi AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)
 Yoshihiro MAKIDE (*Radioisotope Center, The University of Tokyo*)
- 1P27 EFFICIENCIES OF COAXIAL TYPE HP-Ge DETECTOR OF LARGE VOLUME AND

SEMI-PLANAR TYPE HP-Ge DETECTOR

Daiya KAJI, Sin-ichi GOTO, Hisaski KUDO (*Faculty of Science, Niigata University*)

- 1P28 DETERMINATION OF Mn AND Cr IN JSS STEEL SAMPLES BY THERMAL NEUTRON ACTIVATION ANALYSIS

Kenji TOMURA, Hiroyuki TOMURO (*Institute for Atomic Energy, Rikkyo University*)

- 1P29 A MOVEMENT OF EARLY SUEKI WARE BY ELEMENTAL ANALYSIS

Toshikazu MITSUJI, Shintarou TAKABA (*Nara Univ. of education*)

Takayuki TAKEUCHI, Yukihiro NAKANO (*KUR*)

- 1P30 REACTOR NEUTRON INDUCED PROMPT GAMMA-RAY ANALYSIS OF ANCIENT GLASSES

Takeshi TOMIZAWA (*Faculty of Literature, Keio University*)

Chushiro YONEZAWA (*Japan Atomic Energy Research Institute*)

Yoshitaka MINAI (*School of Science, The University of Tokyo*)

- 1P31 BASIC EXAMINATION FOR THE DETERMINATION OF MINUTE ORDER HALF-LIFE NUCLIDES BY k_0 -BASED NEUTRON ACTIVATION ANALYSIS

Chushiro YONEZAWA, Rusuka Prima PUTRA, Hideaki MATSUE (*Japan Atomic Energy Research Institute*)

- 1P32 DEPENDENCE OF THERMOLUMINESCENCE PROPERTIES FROM QUARTZ ON Al- AND OH-IMPURITIES

Tetsuo HASHIMOTO, Toshihiko ARIMURA, Eiji TAKAHASHI (*Faculty of Science, Niigata University*)

- 1P33 RADIOACTIVE AEROSOLS FORMED BY HEATING ACTIVATED METALS CONTAINING VARIOUS RADIOACTIVE NUCLIDES

Yuichi OKI, Masaharu NUMAJIRI, Takenori SUZUKI, Taichi MIURA, Yukio KANDA, Kenjiro KONDO (*National Laboratory for High Energy Physics*)

- 1P34 CHANGES OF THERMOLUMINESCENT PROPERTIES FROM QUARTZ CRYSTAL SLICES ACCOMPANIED WITH THERMAL ANNEALING TREATMENTS

Tetsuo HASHIMOTO, Eiji TAKAHASHI (*Faculty of Science, Niigata University*)

- 1P35 CREATING A NEW DESIGN SYSTEM USING A COOLED CCD CAMERA

Yoichi OKAMOTO, Shuichi ENOMOTO, Fumitoshi AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)

Ryusuke HIRASHIMA (*UNI-HITE Co.*)

- 1P36 THE CORRELATION OF RECOIL COMPLEX FORMATION IN THE SOLID SYSTEM OF WATER-SOLUBLE METALLOPORPHYRIN ION ASSOCIATES WITH STRUCTURAL FACTORS
Hitoshi SHOJI (*Department of Chemistry, University of Tsukuba*)

14:40 - 17:40 (Thursday, October 24)

- 3P01 THE MEASUREMENT OF ISOMERIC YIELD RATIO OF FISSION PRODUCT IN SPONTANEOUS FISSION OF ^{252}Cf

Kazumi NAGASAWA, Rie SAITO, Hisaaki KUDO (*Faculty of Science, Niigata University*)

- 3P02 STUDY OF PROTON INDUCED FISSION OF ^{238}U BY COUNTER METHOD

Kiyoshi NAKANISHI, Koichi TAKAMIYA, Takakazu INOUE, Akihiko YOKOYAMA, Tadashi SAITO, Hiroshi BABA (*Faculty of Science, Osaka University*)

Ichiro NISHINAKA, Kazuaki TSUKADA, Yasuji OURA, Yuichiro NAGAME (*Japan Atomic Energy Research Institute*)

Yuliang ZHAO (*Faculty of Science, Tokyo Metropolitan University*)

Masashi TANIKAWA (*School of Science, University of Tokyo*)

- 3P03 NEUTRON CAPTURE CROSS SECTION OF ^{241}Am
 Nobuo SHINOHARA, Yuichi HATSUKAWA, Kentaro HATA, Syouji MOTOISHI, Katsutoshi KOBAYASHI, Nobuaki KOHNO, Masakazu TANASE (*Japan Atomic Energy Research Institute*)
- 3P04 MOMENTUM TRANSFER IN THE REACTION SYSTEMS OF $^{14}\text{N} + ^{165}\text{Ho}$ AND $^{40}\text{Ar} + ^{141}\text{Pr}$ AT INTERMEDIATE ENERGIES
 Kazuhiko MUKAI, Akihiko YOKOYAMA, Shinya MORIMOTO, Tadashi SAITO, Hiroshi BABA (*Graduate School of Science, Osaka University*)
 Yoshitaka OHKUBO (*The Institute of Physical and Chemical Research (RIKEN)*)
 Atsushi SHINOHARA, Toshiharu MUROYAMA, Michiaki FURUKAWA (*Graduate School of Science, Nagoya University*)
 Sadao KOJIMA (*Aichi Medical University*)
- 3P05 THE HALF-LIFE OF α -EMITTERS CALCULATED BASED ON BARRIER PENETRATION FACTOR
Yoshio HOMMA, Yuko MURASE, Keiko HANDA (*Kyoritsu College of Pharmacy*)
- 3P06 RADIOCHEMICAL IDENTIFICATION OF ^{236}Am
Yasuji OURA, Kazuaki TSUKADA, Yuichi HATSUKAWA, Nobuo SHINOHARA, Ichiro NISHINAKA, Kentaro HATA, Yuichiro NAGAME, Shin-ichi ICHIKAWA (*Department of Radioisotopes, Japan Atomic Energy Research Institute*)
 Takeshi OHYAMA, Yuliang ZHAO, Keisuke SUEKI (*Faculty of Science, Tokyo Metropolitan University*)
- 3P07 ^{127}I MÖSSBAUER SPECTRA FOR IODOBENZENE DIACETATES $\text{Ph}(\text{O}_2\text{CCH}_n\text{X}_{3-n})_2$ ($\text{X} = \text{F}, \text{Cl}, \text{Br}$; $n = 1-3$)
Masashi TAKAHASHI, Norio NAKAJIMA, Masuo TAKEDA (*Faculty of Science, Toho University*)
 Hiroyuki SAWAHATA, Yasuo ITO (*Research Center for Nuclear Science and Technology, The University of Tokyo*)
- 3P08 SPIN STATES OF ^{57}Fe -ATOMS PRODUCED IN TWO-DIMENSIONAL POLYMER OF $\text{Fe}(\text{II})$ SPIN-CROSSOVER COMPLEX
Takuma SATO, Fumitoshi AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)
 Takafumi KITAZAWA, Masuo TAKEDA (*Toho Univ.*)
- 3P09 MÖSSBAUER SPECTRA FOR THE SPIN-CROSSOVER TWO-DIMENSIONAL POLYMER COMPLEXES WITH $[\text{Ni}(\text{CN})_4\text{Fe}]$ UNIT
Takafumi KITAZAWA, Misako EGUCHI, Masashi TAKAHASHI, Masuo TAKEDA (*Faculty of Science, Toho University*)
- 3P10 MÖSSBAUER SPECTROSCOPIC STUDIES OF $\text{Np}(\text{OH})_4 \cdot n\text{H}_2\text{O}$ AND $\text{NpO}_2(\text{OH}) \cdot n\text{H}_2\text{O}$
Masami NAKADA, Nobuyuki M. MASAKI, Masakatsu SAEKI, Toshiyuki YAMASHITA (*Japan Atomic Energy Research Institute*)
- 3P11 MOSSBAUER SPECTRA OF IRON ORES; CHARACTERIZATION AS RAW MATERIALS FOR PRODUCTION OF CAST IRON
Yoichi SAKAI, Tokihide YOKOI, Kazumasa OHSHITA (*Daido Institute of Technology*)
- 3P12 CORRELATION BETWEEN THE MAGNETISM AND THE IR-TRANSMITTANCE OF THE CRYSTALLIZED CALCIUM GALLATE GLASSES CONTAINING IRON
Shiro KUBUKI, Tetsuaki NISHIDA, Yonezo MAEDA (*Faculty of Science, Kyushu University*)
- 3P13 ^{57}Fe MÖSSBAUER SPECTROSCOPY OF $\text{Cu}_{1-x}\text{Fe}_x\text{GeO}_3$
Takuya OKADA, Jin NAKAMURA, Yoshio KOBAYASHI, Takeshi SUGAWARA, Fumitoshi AMBE (*The Institute of Physical and Chemical Research (RIKEN)*)
 Hideaki KITAZAWA (*National Research Institute for Metals*)
- 3P14 CORRELATION BETWEEN HUGE HYPERFINE MAGNETIC FIELD AND QUADRUPOLE

- SPLITTING AT JAHN-TELLER Ni^{2+} ION IN $Cu_{1-x}^{61}Ni_xCr_2O_4$
Jin NAKAMURA, Takuya OKADA, Yoshio KOBAYASHI, Fumitoshi AMBE (*The Institute of Physical and Chemical Research(RIKEN)*)
 Yoshihiko NORO (*Hitachi M.S.R & D*)
 Hideaki KITAZAWA (*National Res. Inst. for Metals*)
- 3P15 DEVELOPMENT FOR ^{36}Cl MEASUREMENT USING TANDEM ACCELERATOR AT UNIVERSITY OF TSUKUBA
Norihiko MIYAZAKI, Riki SEKI, Takayuki BABA, Nina FUNAYA, Tsutomu TAKAHASHI, Terushi KAIKURA, Yasuo NAGASHIMA, Ryuichi IKEDA (*AMS Group of University of Tsukuba*)
- 3P16 OXIDATION OF MOLECULAR TRITIUM BY MICROBIAL IN THE ENVIRONMENTAL SOIL SYSTEM
Hideki KAKIUCHI, Noriyuki MOMOSHIMA, Yonezo MAEDA (*Faculty of Science, Kyushu University*)
 Tomio OKAI (*Faculty of Engineering, Kyushu University*)
 Shinji SUGIHARA, Susumu OSAKI (*Radioisotope Center, Kyushu University*)
- 3P17 THE EFFECT OF SOIL REDOX CONDITIONS ON THE BEHAVIOUR OF TECHNETIUM
Keiko TAGAMI, Shigeo UCHIDA (*Environmental and Toxicological Sciences Research Group, National Institute of Radiological Sciences*)
- 3P18 Pu-239,240 INVENTORY IN DEEP-SEA SEDIMENT
Mohammad Azizul HAQUE, Takashi NAKANISHI (*Faculty of Science, Kanazawa University*)
- 3P19 ESTIMATION OF FOREST SOIL LOSS AND TRANSPORT USING Cs-137 AND Be-7
Yasunori HAMAJIMA (*Faculty of Science, Kanazawa University*)
 Chisato TAKENAKA, Yuichi ONDA (*School of Agricultural Science, Nagoya University*)
 Minoru FURUTA, Yoshihisa KAMIYA (*Aichi University of Education*)
 Toshiro NONODA (*Mie Prefectural Forestry Research Center*)
- 3P20 NATURAL RADIOACTIVE DISTRIBUTION IN SEVERAL ROCKS MEASURED WITH AN IMAGING ANALYZER
Takayuki KOBAYASHI (*College of Humanities and Sciences, Nihon Univ.*)
 Kimiko HORIUCHI (*Dept. of Environmental Information Sciences., School of Social Information Studies, Otsuma Womens Univ.*)
 Kazutoyo ENDO (*Showa College of Pharmaceutical Sciences*)
- 3P21 DISTRIBUTION OF ^{90}Sr , ^{137}Cs AND ^{239}Pu IN RIVER WATER OF JAPAN
 Yuko SAITO, Yukihiro NISHIMURA, Yoshinori KITADA, Teru TOTANI, Nobuhiko HASEGAWA, Hiroaki HARAOKAWA, Naohisa FURUSATO, Kan KIMURA (*College of Science and Engineering, Aoyama Gakuin University*)
- 3P22 DETERMINATION OF RADON IN GROUNDWATER USING A WATER SOLUBLE SICINTILLATION COCKTAIL
 Atsushi OHNO, Hiroe YOSHIOKA, Masato YANAGA, Kunihiko HASEGAWA (*Radiochemistry Research Laboratory, Shizuoka University*)
- 3P23 FUNDAMENTAL PROPERTIES OF SMALL ELECTROLYTIC CELL FOR TRITIUM ENRICHMENT AND APPLICATIONS TO TRITIUM MEASUREMENT IN ENVIRONMENT
Syojiro KIMURA, Shinichi SATHO, Miho AKITA, Yoko UEDA (*Osaka University of Pharmaceutical Sciences*)
- 3P24 MODEL STUDY OF EFFECT OF ACID RAIN ON TRACE ELEMENT ADSORPTION ON SOIL BY THE MULTITRACER TECHNIQUE
Haifang WANG, Shizuko AMBE, Noburu TAKEMATSU, Fumitoshi AMBE (*The Institute of Physical*

- and Chemical Research(RIKEN)*
- 3P25 INSTRUMENTAL NEUTRON ACTIVATION ANALYSIS AND NEUTRON INDUCED PROMPT GAMMA-RAY ANALYSIS OF DEEP-SEA PELAGIC BEDDED CHERT SAMPLES
Ken-ichi KUBO, Motoyuki MATSUO (*Graduate School of Arts and Sciences, The University of Tokyo*)
 Yukio ISOZAKI (*Faculty of Science, Tokyo Institute of Technology*)
 Chushiro YONEZAWA, Hideaki MATSUE (*Japan Atomic Energy Research Institute*)
 Hiroyuki SAWAHATA (*Research Center for Nuclear Science and Technology, The University of Tokyo*)
- 3P26 DETECTION OF COLLOID PARTICLES AND MEASUREMENT OF ITS GROWTH PROCESS BY LASER INDUCED PHOTOACOUSTIC SPECTROSCOPY
Saiko NAITO, Tsutomu SEKINE, Hiroshi KUDO (*Graduate School of Science, Tohoku University*)
- 3P27 REGIOSELECTIVE HYDROGEN ISOTOPE EXCHANGE REACTION IN BENZOIC ACID II
Hideaki HASEGAWA, Kunio OOHASHI (*Faculty of Pharmaceutical Sciences, Chiba University*)
 Hiroko SEKI (*Chemical Analysis Center, Chiba University*)
- 3P28 PRELIMINARY ANALYSIS ON RADIATION EFFECT FOR CRYSTALLIZATION OF SOLUBILITY LIMITING SOLID PHASE
Hideki KODAIRA, Atsushi NEYAMA (*Computer Software Development Co., Ltd.*)
 Mikazu YUI, Hitoshi MAKINO (*Power Reactor and Nuclear Fuel Development Corporation*)
 Hideo KITAO, Hirokazu TATIKAWA, Shin-ichi KATAOKA (*Mitsubishi Heavy Industries, Ltd.*)
- 3P29 STRUCTURES OF NITRIDOTECHNETIUM COMPLEXES WITH AMINE OXIME LIGANDS
 Yuko KANI, Tsutomu TAKAYAMA, Tsutomu SEKINE, Hiroshi KUDO (*Graduate School of Science, Tohoku University*)
- 3P30 HYDROLYSIS REACTION OF HEXAKIS(THIOUREA)RHENIUM(III)ION
Masahiko YUASA, Hideo SUGANUMA, Takashi OMORI (*Faculty of Science, Shizuoka University*)
- 3P31 STUDY OF Eu FULLERENES BY RADIOCHEMICAL METHOD
Takashi YAMAUCHI, Masaaki ENDOU, Kazuhiko AKIYAMA, Keisuke SUEKI, Kouichi KIKUCHI, Hiromichi NAKAHARA (*Faculty of Science, Tokyo Metropolitan University*)
 Takeshi AKASAKA (*Graduate School of Science and Technology, Niigata University*)
- 3P32 STUDY OF ENDOHEDRAL LANTHANOID FULLERENES
Kazuhiko AKIYAMA, Keisuke SUEKI, Kouichi KIKUCHI, Hiromichi NAKAHARA (*Faculty of science, Tokyo Metropolitan University*)
 Takeshi AKASAKA (*Graduate School of Science and Technology, Niigata University*)
- 3P33 PRODUCTION OF RADIOACTIVE FULLERENES USING NUCLEAR REACTIONS (III)
Keisuke SUEKI, Kouichi KIKUCHI (*Faculty of Science, Tokyo Metropolitan Univ.*)
 Tsutomu OHTSUKI, Kazuyoshi MASUMOTO (*Laboratory of Nuclear Science, Tohoku Univ.*)
 Satoaki MITSUGASHIRA (*Research of Material Science, Tohoku Univ.*)
 Yuichiro NAGAME (*Japan Atomic Energy Research Institute*)
- 3P34 MULTITRACER STUDY ON EXTRACTION OF NOBLE METALS WITH N,N-DIALKYL ALIPHATIC AMIDES
Naoya ITO, Yuko SAITO, Kan KIMURA (*College of Science and Engineering, Aoyama Gakuin University*)
 Hirolazu NARITA (*Faculty of Science, Ibaraki University*)
 Tsuyoshi YAITA, Syouichi TACHIMORI (*Japan Atomic Energy Research Institute (JAERI)*)
 Shizuko AMBE, Fumitoshi AMBE (*The Institute of Physical and Chemical Research(RIKEN)*)
- 3P35 MULTITRACER STUDY ON PERMEATION OF RARE EARTH ELEMENTS THROUGH A SUPPORTED LIQUID MEMBRANE
Kazuhiro YASHIKI, Osamu KATAYAMA (*Toho University, The Institute of Physical and Chemical*

Research(RIKEN)

Haruka MAEDA, Shyuichi ENOMOTO, Takuo OZAKI, Shizuko AMBE, Fumitoshi AMBE (*The Institute of Physical and Chemical Research(RIKEN)*)

3P36 SIMULTANEOUS ANALYSIS ON SOLID-LIQUID ADSORPTION BEHAVIOR OF VARIOUS ELEMENTS USING RADIOACTIVE MULTITRACER (2) --NON-IONIC MACRO-RETICULAR COPOLYMER AND ACTIVATED CARBON FIBER

Sadao SHIBATA, Yutaka NODA (*National Institute of Radiological Sciences*)

Shizuko, AMBE, Masako IWAMOTO, Haruka MAEDA, Fumitoshi AMBE (*The Institute of Physical and Chemical Research(RIKEN)*)

