



## Audit Summary

The Chemistry Department appears to have an adequate system of internal controls in place. However, the following report details ways by which the department can further enhance internal controls and compliance with UT Dallas policies, procedures, and best practices.

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## Departmental Background

The Chemistry Department is part of the School of Natural Sciences and Mathematics and consists of undergraduate, graduate, and PhD level programs. They provide undergraduate programs in chemistry and biochemistry and its graduate level programs can be pursued on a full or part time basis. The staff is comprised of 48 full time and 74 part-time employees.

The department maintains laboratories dedicated to teaching students and conducting research. A chemical stockroom is available to all university members and provides a variety of basic lab supplies, gloves, solvents, chemicals and glassware. Additionally, there is a dedicated Technical Staff Associate available to the department that provides assistance with equipment maintenance, inventory, and, chemical management (i.e., monitoring of liquid nitrogen requests and use).

Chemistry Departmental Summary	
FY 2012 Department Budget	\$18,107,665 <sup>1</sup>
Number of Employees	122

## Objective and Scope

The objective of this audit was to provide assurance to UT Dallas management that an adequate system of internal controls exists within the Chemistry Department and to provide reasonable assurance of sound management. The scope of this audit was fiscal year 2012.

To complete this objective, we reviewed selected areas of departmental operations regarding the reliability and integrity of financial and operating information, the effectiveness and efficiency of operations, the safeguarding of assets, and compliance with laws and regulations. Specifically, we performed the following:

- Gained an understanding of operations by interviewing staff, conducting an anonymous survey of faculty and staff members, and by reviewing requested information, policies and procedures, and other documents relevant to internal controls within the department.

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<sup>1</sup> Per PeopleSoft Records and includes Sponsored Projects

- Conducted a risk assessment of departmental operations and focused our testing on the key risk areas within the department, including:
  - Account Reconciliations
  - Expenses
  - Purchasing Cards
  - Inventory Management (chemical stockroom and property)
  - Physical Security of Chemistry Labs
  - Physical Safety of Chemistry Labs

Where applicable, our examination was conducted in accordance with guidelines set forth in The Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing*. The *Standards* set criteria for internal audit departments in the areas of independence, professional proficiency, scope and performance of audit work, and management of the internal auditing department.

### Audit Results

Effective internal controls provide reasonable assurance regarding the achievement of departmental objectives in the following categories: a) effectiveness and efficiency of operations; b) reliability of financial reporting; and c) compliance with laws and regulations. Department heads are ultimately accountable for the internal controls in place in their department. The following lists best practices observed within the department and ways the department head can strengthen internal controls:

Category	Recommendations
<b>Best Practices</b>	<ul style="list-style-type: none"> <li>✓ Thorough documentation for purchasing card transactions</li> <li>✓ Communications with faculty through regular meetings</li> <li>✓ Accurate record-keeping for the Chemical Stockroom</li> <li>✓ Continued increase in federally sponsored projects for research</li> </ul>
<b>Account Reconciliations</b>	<p>For fiscal year 2012, we noted 632 separate instances of cost centers not approved in a timely manner in PeopleSoft. Out of these 632 instances, we noted the following:</p> <ul style="list-style-type: none"> <li>- 298 (47%) involved federally sponsored research projects.</li> <li>- 214 (34%) were also not reconciled in a timely manner.</li> </ul> <p>The timeliness of the approvals for the reconciliations of cost centers is detailed below:</p>

Category	Recommendations																								
	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #d9e1f2;">Number of Acct Periods Approved Late</th> <th style="background-color: #d9e1f2;">Count of Cost Centers</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">1</td><td style="text-align: center;">133</td></tr> <tr><td style="text-align: center;">2</td><td style="text-align: center;">113</td></tr> <tr><td style="text-align: center;">3</td><td style="text-align: center;">126</td></tr> <tr><td style="text-align: center;">4</td><td style="text-align: center;">118</td></tr> <tr><td style="text-align: center;">5</td><td style="text-align: center;">48</td></tr> <tr><td style="text-align: center;">6</td><td style="text-align: center;">74</td></tr> <tr><td style="text-align: center;">7</td><td style="text-align: center;">6</td></tr> <tr><td style="text-align: center;">8</td><td style="text-align: center;">8</td></tr> <tr><td style="text-align: center;">9</td><td style="text-align: center;">4</td></tr> <tr><td style="text-align: center;">10</td><td style="text-align: center;">2</td></tr> <tr> <td style="background-color: #d9e1f2;"><b>Grand Total</b></td> <td style="background-color: #d9e1f2;"><b>632</b></td> </tr> </tbody> </table> <p>While a manual reconciliation process does exist, PeopleSoft is the official system of record for UTD. Reconciliation, review and approval of cost center financial records should be performed on a monthly basis by knowledgeable personnel within 30 days of month-end close.<sup>2</sup></p> <p>Additionally, duplicated efforts are necessitated by the reconcilers since PeopleSoft is updated after the manual reconciliation process has been completed.</p> <p>Failure to timely reconcile and approve cost center reconciliations in PeopleSoft increases the potential for errors, irregularities and misappropriations to go unnoticed by cost center managers. Furthermore, not approving cost centers dedicated to federally funded projects increases the risk of noncompliance with federal regulations and UT Systems Policies.</p> <p><b>Recommendation:</b> The department should encourage the attendance of PeopleSoft training opportunities to help reduce the duplicate efforts currently needed to update PeopleSoft. Furthermore, existing policy should be enforced with Cost Center managers to ensure cost centers are approved in a timely manner.</p>	Number of Acct Periods Approved Late	Count of Cost Centers	1	133	2	113	3	126	4	118	5	48	6	74	7	6	8	8	9	4	10	2	<b>Grand Total</b>	<b>632</b>
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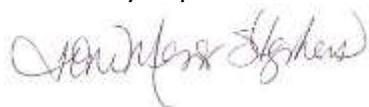
<sup>2</sup> <http://www.utdallas.edu/finance/main/procedure-acctrecon.html>

Category	Recommendations
	<p><b>Management’s Response and Action Plan:</b> <i>The affected personnel will be advised of the availability of PeopleSoft training and the need to reconcile and approve their accounts on PeopleSoft within 30 days of month-end close.</i></p> <p><b>Estimated Implementation Date:</b> <i>Immediately</i></p> <p><b>Responsible Person:</b> <i>John P. Ferraris</i></p>
<p><b>Access to Laboratories</b></p>	<p>During routine walk-throughs of the department, we observed open and unlocked doors to unoccupied laboratories that were not in use but contained equipment and chemicals. Section II, paragraph H under the Chemical Laboratory Safety Guidelines of the <i>Chemical and Hazardous Materials Safety Manual</i> states that “doors must be locked when the laboratory is unoccupied for extended periods of time.”<sup>3</sup></p> <p>Also, because the doors used to access these laboratories require the use of a physical key rather than a card system, there is currently no way to determine who accessed the laboratory if assets or chemicals were noted as missing.</p> <p>The Chemistry department’s inventory is valued at approximately \$1.26 million, with about 50% of that purchased with federal funds. Without proper controls over the security of the labs, the department may be at risk of theft, loss, damage to property or humans, or even federal fines and penalties.</p> <p><b>Recommendation:</b> We recommend the Chemistry Department assess the risks of their physical security procedures, especially over the laboratories. Also, given the increased volume of federally funded research projects and the growth of the campus, the department should consider expanding electronic card access to include laboratories that currently require only a physical key for entry.</p> <p><b>Management’s Response and Action Plan:</b> <i>Faculty will be advised that lab doors need to be closed, even when occupied. We agree that electronic card access would be superior in terms of security and encourage the administration to provide funds for them.</i></p> <p><b>Estimated Implementation Date:</b> <i>Immediately</i></p> <p><b>Responsible Person:</b> <i>John P. Ferraris</i></p>

<sup>3</sup> [http://www.utdallas.edu/ehs/manuals/docs/chemical\\_safety\\_manual.pdf](http://www.utdallas.edu/ehs/manuals/docs/chemical_safety_manual.pdf)

<p><b>Policies and Procedures</b></p>	<p>The department does not have a written policies and procedures manual specific to departmental operations. Departmental policies and procedures assist the department in meeting their mission through clear communication of the responsibilities of departmental personnel. Lack of documented policies and procedures may lead to departmental inefficiencies and weak internal controls.</p> <p><b>Recommendation:</b> We recommend the department create a policy and procedure manual that includes but is not limited to the following:</p> <ul style="list-style-type: none"> <li>• Job descriptions</li> <li>• Laboratory safety policy</li> <li>• Minimum training requirements</li> <li>• Inventory tracking and monitoring procedures</li> <li>• Account reconciliation policy</li> </ul> <p>The manual should be reviewed and approved annually with an authorizing signature for updates.</p> <p><i>Management's Response and Action Plan: A manual along the lines described above will be created.</i></p> <p><i>Estimated Implementation Date: Mid 2013</i></p> <p><i>Responsible Person: John P. Ferraris</i></p>
<p><b>Other Issues</b></p>	<p>Other issues discussed with the department head include updating the website to include only current faculty and staff members and ensuring all controlled assets are checked annually for UTD tag and correct location.</p>

We appreciate the courtesy and cooperation received from the management and staff of the Chemistry department.



Toni Messer Stephens  
Executive Director of Audit and Compliance

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- Dr. John P. Ferraris, Professor and Department Head, Department of Chemistry

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